

Census of India, 1931

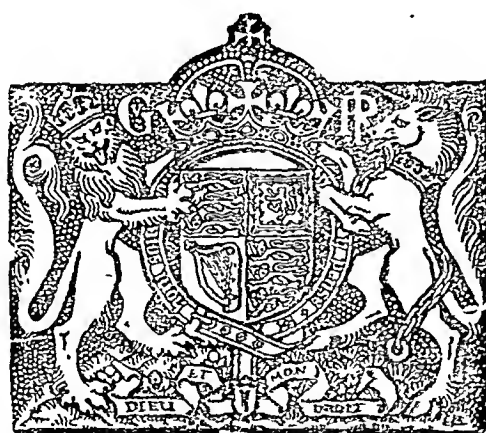
VOL. I—INDIA

Part I—Report

by

J. H. HUTTON, C.I.E., D.Sc., F.A.S.B.,

Corresponding Member of the Anthropologische Gesellschaft of Vienna



To which is annexed

an

ACTUARIAL REPORT

by

L. S. Vaidyanathan, F. I. A.

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Simla, the 4th June 1933.

To

*The Hon'ble Sir HARRY HAIG, K.C.S.I., C.I.E., I.C.S.,
Member of the Governor-General's Executive Council,*

Simla.

Sir,

I have the honour to submit herewith a report on the census of India taken in February 1931. The reports and tables prepared for individual Provinces and States have already been published, since the necessary material is available in detail provincially before it can be compiled for the whole of India. These provincial and state volumes will be found to deal in particular with points which I have been able only to treat in general, and the method I have followed for the most part has been to examine for myself the figures for India as a whole and then to turn to the provincial reports to point a moral or adorn the tale, but the conclusions formed and the opinions expressed are my own.

This India volume consists of five parts, (i) my report (together with that of the actuary, Mr. L. S. Vaidyanathan), (ii) the statistical tables for India, (iii) a collection of papers of ethnographical interest, (iv) the social and linguistic maps for India and the Provinces bound separately and (v) an administrative report, the two latter volumes being intended primarily for departmental use. In submitting it, it is my fortunate duty to bring formally to your notice the able series of the 1931 Census Reports already mentioned, which are numbered indeed after this volume but have appeared before it. I have therefore the honour to recommend with confidence to your perusal not but the other twenty-seven, and to be

Sir,

Your most obedient servant,

*J. H. HUTTON,
Census Commissioner for India.*

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INTRODUCTION.

At the very outset of this Report I find it incumbent on me to depart from precedent and to begin with acknowledgments, first of all, as is fit, to the people of India themselves whose good sense, good citizenship and general co-operation made the taking of the census possible, but most of all perhaps to that great body of some two million unpaid enumerators by whom the census was actually taken and without whom it could not have been taken, many of whom were out of pocket by the taking and many of whom carried out their work under circumstances of opposition, interference and general unpopularity. The greatest credit is due to them, and that, and a *sanad* of printed paper, is the only reward that most of them have had. The taking of the pecennial census in India involves the co-operation of more than one-sixth of the world's population over an area of nearly two million square miles in a combined response to organised enquiry, and the expense would be prohibitive if all the services rendered were paid. Moreover enumerators' duties were often as onerous physically as they frequently were morally. While city enumerators had generally to take larger blocks than usual since enumerators were harder to come by, those in rural areas often had to cover long distances; in Baluchistan the average enumerator had a block of 836 square miles (in the tribal areas 1,460) in which to find his fifty houses, as a 'village' was often a moving encampment of two or three tents with an average area of 36 square miles to itself.

Acknowledgments are due likewise to the other links in the chain of organisation. Supervisors, Charge Superintendents, District Census Officers, District Magistrates are all part of the necessary machinery and no whit less essential than the enumerator, and in their case the census came as an extra—a piece of gratuitous and troublesome overtime work added to their usual duties in many places already onerous and trying above the ordinary by reason of political agitation. For this census like that of 1921 had the misfortune to coincide with a wave of non-co-operation, and the march of Mr. Gandhi and his *contrabandistas* to invest the salt-pans of Dharasana synchronized with the opening of census operations. The blessing which he gave to the census at the last minute in 1921 was this time wanting, and, though he himself is not known to have issued any advice to boycott the census, it seemed good to some other Congress leaders to do so, as, although they do not seem to have regarded a census as objectionable in itself, the opportunity for harassing government seemed too good to be missed, and January 11th, 1931, was notified by the Congress Committee to be observed as Census Boycott Sunday. This boycott was not, however, taken up with any real enthusiasm and, except in the Gujarat cities of Ahmadabad, Broach and Surat and some smaller municipalities like Ghatkopar and Villaparle, had very little ultimate effect on the taking of the census; but the petty annoyances, resignations and interferences with the preparations for final enumeration very greatly increased the work, the responsibilities and the anxieties of local officers in charge of census work, including as they did not only revenue officers of all grades and village schoolmasters but police, magistrates, paid and honorary, railway officials, forest officers, port officers, ministerial officers in government offices, municipal officers and many others. On the other hand no less trouble was caused in some places by an excess of the zeal on the part of all parties to register as many adherents as possible in view of the possibility of a communal franchise based on the census returns. This was particularly the case in the Punjab, where the exterior castes, badgered first by one party then by another to return themselves as Sikhs, Hindus or Muslims as the case might be, labelled themselves *Ad Dharmi*, or adherents of the original religion, and so added to the number of religions returned in the census schedules. So high did feeling run over the return of religion in the Punjab that disputes as to whether a man was *Ad Dharmi* or Sikh led to a number of affrays and at least to one homicide. Politics were also troublesome in the borders of Orissa where a pan-Oriya propaganda, carried on to an extent calculated to frustrate its own purposes, engendered a corresponding counter-propaganda, all detrimental to census taking. Special measures were needed in Madras and much additional work caused to the Superintendent of that province and in a less degree also to the Superintendents of

Bengal, Bihar and Orissa and the Central Provinces. Other provinces experienced the usual difficulties that attend census taking in India. In one the Bhils for instance would not have their houses numbered on superstitious grounds, while in Burma householders objected on artistic grounds. In the Shan States the thirteenth and last survivor of a pre-annexation raid happened to occupy the thirteenth house in a block. As the enumerator inconsiderately refused to rearrange the numbers, he decided that his was up indeed, went forth into the jungle and committed harakiri. In less law-abiding places the disposition was rather towards disembowelling the enumerator than the enumerated, while the effacing of census numbers was a minor difficulty that was particularly troublesome in 1931. Here and there wild beasts interfered instead of wild men, and the Administrator of Bastar State, when inspecting census work on the night itself, was attacked by a tiger, which sprang on to the bonnet of his car, but finding the pace and the radiator too hot for him failed to make an end either of the inspector or his inspection.

Difficulties notwithstanding, the census was taken at the appointed time and a complete return was received from all places except Ahmadabad in Gujarat. The returns for some other towns in Gujarat, *e.g.*, Broach and Surat, were probably defective, but, as received from the municipalities concerned, were ostensibly correct. In the case of Ahmadabad the census was not completed and the number actually enumerated was estimated to be some seventy-five to seventy-six thousand short of the real total; according to the census since taken by the Ahmadabad Municipality itself the deficiency was nearly the double of my estimate. In Burma a rebellion broke out between the preliminary and the final enumeration. It interfered with the latter in at least one district but with the former hardly at all. In the Census Abstract published for Parliament I based my estimates of the error caused in the census enumeration by Congress activities on the very carefully estimated error worked out by the Census Superintendent of Bombay for that province which came to $\cdot 04$ per cent.; this I doubled for the whole of India arriving at a maximum deficiency of $\cdot 085$ per cent. in the Indian figures. If the Ahmadabad Municipality return be accepted and the deficiency be re-calculated accordingly the error still works out at only $\cdot 1$ per cent. for the total population of India. This of course refers to any deficiency caused by the clash of politics with the census. Other inaccuracies, whatever the amount, are likely to be fairly constant from census to census; the error in the numerical count has been put at a maximum of one per mille and is probably less. The Census Commissioner in 1921 estimated the percentage of error in recording sex and religion at about one per cent.; I doubt myself if it is nearly as high as this, but otherwise his estimates probably hold good of this census also. Owing to the Sarda Act however there has been a definite decrease of accuracy in the record of civil condition, and I estimate the error in this respect to be not less than $\cdot 5$ per cent. and probably higher. Fortunately it seems possible to allocate with safety at least the greater part of this error to deliberately inaccurate returns of 'unmarried' instead of 'married' for girls married during 1931 in contravention of the age-limits imposed by the Marriage Restraint Act. Error in classification after the return has been made is quite a different thing from error in record and it is extremely difficult to form any estimate of its extent. The entries in the schedules are copied on to slips, omitting the block, circle and charge numbers and of course the personal names, and are then sorted into sets of labelled pigeon-holes and counted for the figures which constitute the tables. Different colours are used for different religions and each slip is stamped or printed with a symbol to denote sex. These symbols in 1931 were amplified by hand to signify civil condition. It was found quicker to add to the symbol than to have previously marked symbols from which the correct one had to be selected, a course which involved a choice of six according to sex and civil condition for each individual slip. Probably also the practice of altering by hand involves less error than that of selection when the tendency will be for the copyist, who must turn out a minimum number of slips and is paid in part at any rate by outturn, to fill up the wrong slip rather than to waste time by changing it when wrongly selected. In any case there is room for error in slip copying and for error again in sorting, though careful supervision at both stages may keep it down to a very small margin. A certain difficulty and anomaly was also introduced into tabulation by the fact that the Burma figures were tabulated on a different system from that followed in India proper. The method of tabulating by religion has never been found very suitable in Burma and on this occasion was abandoned for tabulation by race in the interests

of that province, but at the cost of some inconsistencies in the presentation of the India figures.

This digression on error has led me aside before making my acknowledgments to the census officers of provinces and states, of whom a list will be found in Chapter I. It seemed to me that their work as a whole was admirable. Several had special difficulties Captain Mallam in the North-West Frontier Province, Mr. Turner in the United Provinces, Mr. Porter in Bengal and Mr. Shoobert in the Central Provinces all experienced difficulties in organising their enumeration on account of political agitation; and Khan Sahib Ahmad Hasan Khan in the Punjab had his trouble when the actual enumeration took place; even in Delhi his enumerators found their house numbers obliterated and their movements obstructed. Mr. Dracup in Bombay had to contend with the most difficult and troublesome situations of all on account of the anti-census campaign in Gujarat. Bombay has a bad reputation for breaking the health of her Census Superintendents. The first Superintendent in 1911 broke down after the enumeration was over and the early death of the 1921 Superintendent must be imputed at any rate in part to the strain of that census. Mr. Dracup managed to carry on till the compilation was almost finished and his reports begun (for the Bombay post involved writing two additional reports, one for the Western India States Agency, the other for the Bombay Cities), but his health could not stand it; he suffered the chagrin of being beaten on the post, and had to make over his material to Mr. Sorley. More provinces than usual were handicapped by similar changes. In Bihar and Orissa Mr. Scotland's health broke down very early in the operations and his work was taken over by Mr. Lacey who had a very uphill task indeed to get his census to synchronize, as he came in at a critical stage which found him unfamiliar with the early part of the work and at which the preparations for enumeration had fallen sadly into arrears as the inevitable result of Mr. Scotland's ill-health. In the North-West Frontier Province Captain Mallam lasted like Mr. Dracup till his report was part written; at the earlier stages he was more than once taken away from his census work for administrative ends and but for these diversions would probably have finished single-handed; as it was, Mr. Dundas had like Mr. Sorley the difficult task of writing a report on a census of which he had seen nothing but the materials collected in the course of operations in which he had taken no part at all. Mr. Shoobert in the Central Provinces and Berar was likewise hampered by being abstracted from his census work for administrative necessities for an inconveniently long period at an early stage of the operations and was delayed by illness towards their close. Rai Bahadur Anant Ram in Kashmir had the disadvantage of not having been in charge of the census from the start of operations and Khan Bahadur Gul Muhammad Khan in Baluchistan was taken away before he had finished to be Wazir-i-Azam of Kalat State and had to write his report while performing the onerous duties of his vizierate. Colonel Cole with Rajputana and Ajmer-Merwara, Mr. Porter with Bengal and the City of Calcutta and Khan Sahib Ahmad Hasan Khan with the Punjab and Delhi all had two Reports to write instead of one.

Special difficulties were experienced in Madras and in a lesser degree in Assam and also in Bihar and Orissa and more or less in all provinces as a result of the change in system, which actually took place in 1921 but the full effects of which were not experienced until this census, by which all costs were made debitable to the Central Governments. The local expenses of enumeration, including the travelling allowances of all local officers doing census work in addition to their ordinary duties, and including stationery, stamps and so forth required in mofussil operations, had all been charged hitherto to the expenses of general administration, much the most convenient and economical way of dealing with small items extremely difficult to disentangle from others where no separate organisation existed; and owing to their being merged in general administration no separate record of the expenditure was extant. In 1931 the operations were carried out precisely as before and the methods used by local officers at previous censuses were used again. It was not till afterwards that it was discovered that serious liabilities had been incurred in the matter of travelling allowances to meet which no provision had been made in budgetting. District Officers had little enough time to spare for the census in any case, and the general tendency was in many cases to take the position that this was a central charge, let the central authorities see to it. Moreover, many of the claims were submitted at a date

which though admissible for ordinary audit purposes was so long after the journeys had taken place that any check of the claim was made extremely difficult. Mr. Yeatts in Madras received no fewer than 26,000 unanticipated bills for travelling allowances amounting in all to approximately Rs. 3,00,000, many of them claims received during 1932 for journeys undertaken in 1931. Many of these bills contained claims relating to a whole charge or even taluk, and the actual number of personal claims involved was greatly in excess, of course, of the mere total of bills. By subjecting each bill to the strictest personal scrutiny in the light of the actual expenses probably incurred Mr. Yeatts was able to reduce the total actually paid to Rs. 1,30,000, but it was only by ruthlessly cutting down the claims to the amount by which claimants were likely to have been actually out of pocket, a course of action only made possible by the fact that Mr. Yeatts himself had never drawn more than his actual out of pocket expenses when touring, whatever the rules allowed him to draw above that. Both he and Mr. Mullan in Assam must have incurred no little odium in the course of their pruning of travelling allowance bills for the extent and nature of which they were in no way to blame, as they had not even been in a position to prepare their own budgets, since the provincial budgets for the year of enumeration were all prepared by local governments before superintendents took over charge, and there was in any case no separate record of the very considerable sums spent in this way from provincial revenues in 1921.

It was another of the misfortunes of the 1931 census that it coincided with a fall in revenue and a period of economic depression which made the most rigorous economy necessary and which left me no choice but to cut all expenditure as fine as possible and to goad my Census Superintendents unremittingly in an attempt to finish sooner and spend less. Their responses were loyal and whole hearted, and in almost every province the actual cost of the census per head censused has been appreciably reduced, if those items be excluded which never appeared in the accounts of 1921. These items not only included the travelling allowance of local officers, previously debited to general administration and the provincial revenues, as well as stamps, stationery and other items used in district offices and similarly debited, but also included all pay of officers whether Provincial or Imperial who were deputed to the Census Department, as well as their leave pay earned during their census service, passage contributions and so forth. In some cases the budget of this census has even been debited with the leave pay of officers who served the department in 1921 or earlier but not in 1931 at all. Wages had all increased since 1921 and the cost of printing to the census has been enormously enhanced, in some cases by two hundred per cent. or more, as the result of a change in the method of costing. Under the old method the overhead charges were not debited at all to the census when the printing was done, as most of it is, in Government presses. It will be seen at once therefore that a very large part of the increase in the gross cost of the census, approximately Rs. 48,76,000 in 1931 against Rs. 40,00,000 in 1921, is an increase on paper only. As nearly as can be reckoned the actual net expenditure incurred for the 1931 census which is comparable with the expenditure on that of 1921, excluding items not then charged to the census budget, amounts to Rs. 40,13,000, and when this is reduced to the cost per thousand of persons censused, which is the only fair standard of comparison, the 1931 census comes quite creditably through the test having cost only Rs. 12·8 per thousand persons censused as compared to Rs. 14 per thousand in 1921. The cost of the census of England and Wales in 1921 was £9-5-6 per thousand (about Rs. 124 of Indian money) "exclusive of the expenditure on printing, stationery, maps, etc.", the exclusion of which from the costs of the Indian census would reduce the cost per thousand to Rs. 13·3, while the census of Northern Ireland in 1926 cost over £15-6-4 per thousand inclusive of printing, etc., that is Rs. 202 per thousand as compared to India's Rs. 14 inclusive. The census of India therefore is not only by far the most extensive census operation in the world but, besides being one of the quickest, it is probably the cheapest. Even so the cost is no inconsiderable item at a time when the difficulty of restricting expenditure to the limits imposed by dwindling revenue is so difficult that many countries decided to dispense entirely with the census due in 1931; and it was therefore necessary to exercise a very parsimonious economy, and I owe to all Census Superintendents and likewise to their administrative, office and compiling staff not only my acknowledgments for their ungrudging co-operation but also my apologies for driving them at a pace

which has admitted of closing down the department some seven months earlier than usual, and for cutting down their estimates to the finest possible margin compatible with reasonable efficiency. The work of a provincial census officer in India, all done against time, against expenditure, and without holidays, is far from the pleasant occupation which its interest would make it were the need for speed and economy less exacting.

In spite of this there has been no falling off in the quality of the reports which well maintain the high standard set by past series. The Andamans and Nicobars Report reflects Mr. Bonington's lifelong acquaintance with the forests of those islands and their shy, little-known inhabitants; Colonel Cole brought to the Rajputana volume a knowledge of the Rajputs and their clans acquired not only regimentally but in the course of several years as Recruiting Officer for Rajput battalions; he also showed a commendable despatch and but for his press would have finished even earlier than he did. The other authors of British India Reports are all executive officers in the Imperial or Provincial services and the outlook of the settlement officer is conspicuous among them throughout the series, from Mr. Mullan's lively volume on Assam (also one of the first to be published) to Mr. Turner's exceptionally full and detailed report on the United Provinces. Their several qualities may frequently be inferred from the excerpts given freely in this volume, and where all have reached a high standard, it would seem invidious to discriminate. The reports of Messrs. Bonington, Shoober and Lacey all contain interesting ethnographical material; Mr. Yeatts' particularly well written volume is noticeable for his treatment of infirmities, and Mr. Porter's for a new attack upon the population problem and for an interesting account of the processes of certain decaying rural industries. In Burma and in Bombay Messrs. Bennison and Sorley have brought to the census the experience gained in the study of social and economic questions, and Khan Sahib Ahmad Hasan Khan has opened the volume on Delhi, new to the series, with a conspectus of the capital's historic past. Among the States and Agencies the Rajputana volume has already been mentioned, as also Messrs. Dracup and Sorley's on the Western India States, another new addition to the series, while Mr. Venkatachar has filled in somewhat of a hiatus in the census accounts of the peninsula with his exceptionally interesting report on Central India.

The States that contribute separate volumes pay independently for their own operations and the total cost of their census. Owing to this fact I was fortunate enough to be spared the unpleasant task of reducing budgets, but the exigencies of the India work compelled me in some cases to keep hurrying their Census Commissioners during the compilation stage, and my acknowledgments are due to the latter no less than to the Census Superintendents in British India for their efforts to comply with an impatience which they may well have regarded as untimely, and which must certainly have been inconvenient at any rate to Rai Bahadur Anant Ram in Kashmir, who had to finish off his census at a time of political and economic disturbance with a depleted and inadequate staff. Of the other states' Census Commissioners Mr. Ghulam Ahmed Khan in Hyderabad and Mr. Rang Lal in Gwalior have approached their subject from the administrative points of view like most of the Census Superintendents in British India, Mr. Khan incidentally adding to our knowledge of the Chenchus, while Mr. Venkatesa Iyengar in Mysore has given another detailed account of processes of declining industries. Mr. Sankara Menon in Cochin has written a thoughtful report as an educationist, a calling unrepresented in the British series. In Travancore Dr. Pillai has to his credit an admirably produced report embodying not only a brief economic survey of the state but a good deal of fresh information as to the vanishing tribes and disappearing industries of a state which is so advanced that he was able to make a useful experiment in compilation by the employment, as in Cochin, of women as sorters and slip-copyists, and very efficient they proved. The outstanding report among the states is again that of Mr. Mukerjee on Baroda who is to be congratulated not only on his admirable presentation of material but on the extreme rapidity with which he produced so comprehensive a volume. His previous experience in 1921 has been put to the best account and I have myself taken advantage of it, particularly in the arrangement of fertility figures. He is also responsible for an innovation in enumeration by *billets individuels* which may very well bear much fruit at the next census of India.

To Mr. Trousdell and Mr. Golder of the Government of India Press in Simla I owe both acknowledgments for their patience and despatch, and apologies for

the inconvenience caused by repeated calls for fresh proofs of altered tables, while I have to thank Mr. Carter of the Government of India Press in Delhi as well as Mr. Golder for much very useful advice and assistance. To Colonel A. J. H. Russell, then Public Health Commissioner, I owe the diagrams of vital statistics and information on several points in Chapter VII. To several others, to more indeed than I can mention here, I owe acknowledgments of some kind for advice, information or criticism. Mr. L. S. Vaidyanathan of the Oriental Government Security Life Assurance Company, Bombay, who has contributed the most comprehensive actuarial examination of the Indian age returns yet attempted and the life tables based on them, Dr. B. S. Guha of the Anthropological Branch of the Zoological Survey of India, who carried out for this census a detailed anthropometrical survey of certain castes and tribes and who has contributed his valuable analysis of their physical characteristics to the volume of ethnographical appendices, Colonel R. B. Seymour Sewell, Director of the same Department, Rai Bahadur Ramaprasad Chanda and Mr. E. J. H. Mackay, both of the Archæological Survey, have all helped me with information and friendly criticism and to Dr. Guha again I owe the drawings of the Bayana, Sialkot and Nal crania that appear in Chapter XII. Mr. Yeatts has added to my obligation to him by his assistance in proof reading.

My final but far from least weighty acknowledgments are due first to my own office, to whose ungrudging co-operation is due the early completion of the report, particularly to the Superintendent Mr. A. R. Chitnis, to whose statistical experience and careful scrutiny of figures must be attributed whatever degree of accuracy their presentation here can claim, to the head compiler, Mr. F. E. Wright and his second Mr. Mulherkar, who are primarily responsible for the compilation of Part II; and then to my predecessors, to Sir Edward Gait in particular, whose work in previous decades has done so much to simplify mine in this. The conception of the social maps was due to a scheme for a population map of India evolved by Colonel Tandy in 1921 and here modified and adapted to suit small scale maps and a high density of population; the idea of the linguistic maps and the record of bilingualism first occurred to me in the course of correspondence with Colonel T. C. Hodson, now Wyse Professor of Anthropology in Cambridge. The German anthropologist, Baron von Eickstedt, suggested a series of maps which would show the population of each village by caste and religion in coloured points of varying shape and size. The system is an admirable one which would if applied to India give a most valuable and interesting record, but the cost of producing series of maps on the large scale necessary to show every village with its inhabitants by castes or tribes was in itself obviously prohibitive, apart from the time and labour involved in compiling the statistics of caste by villages.

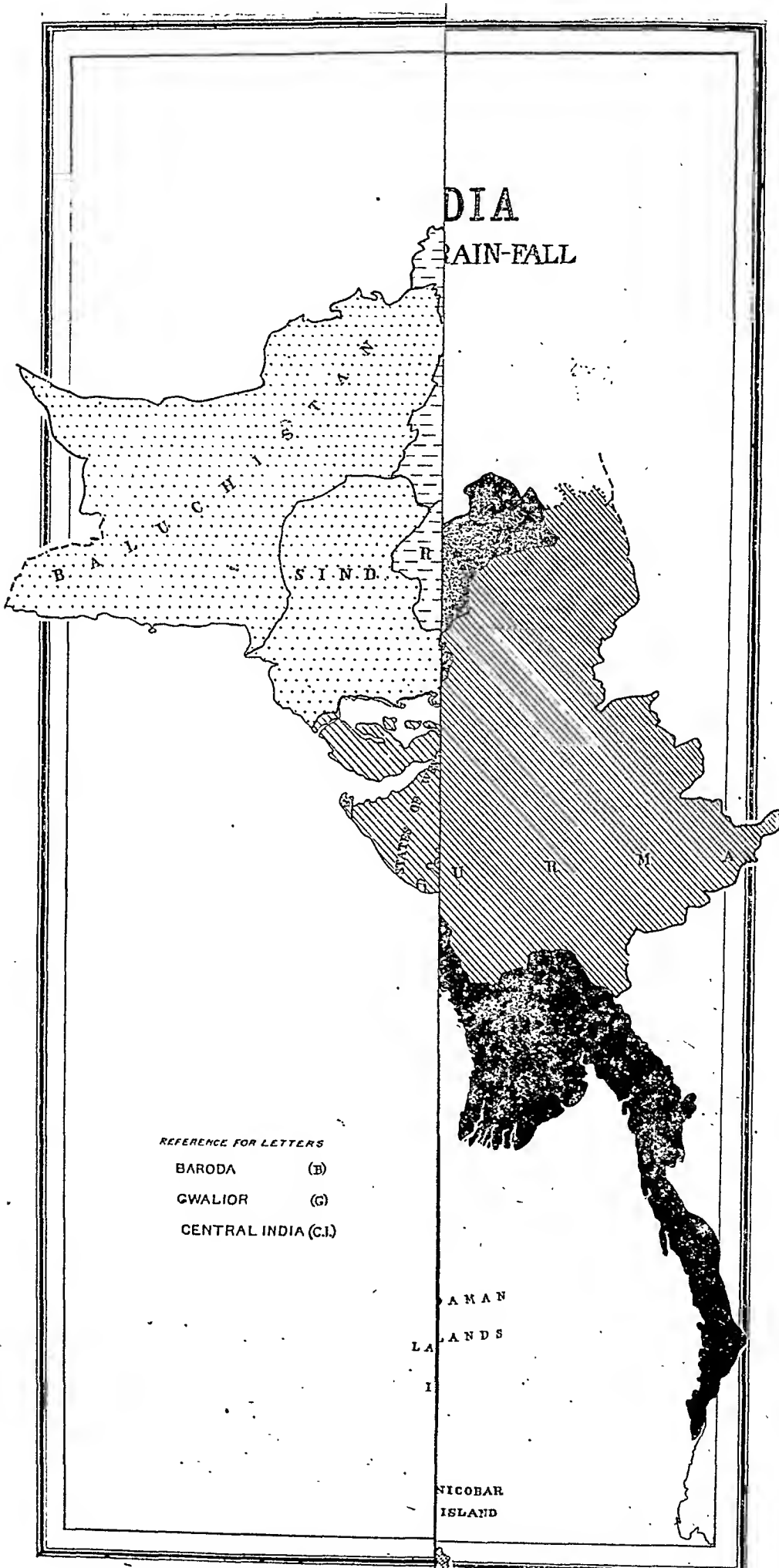
A word of apology is due on the contents of this report. The opportunities of a census of India come if at all but once to most of us, and I am only too conscious of opportunity neglected, for I have left undone that which I ought to have done and I have done much less than I should like to have done. *Res angusta civitatis* is my defence; I should be the first to admit it inadequate, but the imperative necessity for a rigid economy made any departure from and still more any enlargement of the known and familiar paths dangerous as well as extremely difficult. As it was, some of the material actually collected in the enumeration schedules had to be left uncopied and unsorted as a measure of retrenchment, and the industrial statistics of 1921 were not attempted; a tally of horsepower, handlooms and mechanical shuttles is hardly a legitimate part of a population census in any case, and the statistics can be just as well collected at another time by the Department of Industries and Labour by means of the circulation of forms unsynchronised with the census schedules. An attempt to collect a return of the educated unemployed on separate schedules was a fiasco, as though large numbers of the schedules were issued very few were received back; the reasons given are various but apathy was probably the prevailing one. Such as they are, both the reasons for the failure and the figures obtained will be found recorded in Chapter IX. The returns of age are probably more accurate than ever before, thanks to the method of treating the figures advocated by Mr. H. G. W. Meikle, as a result of his actuarial examination of the 1921 returns, and adopted for the first time in 1931. On the other hand the figures of urban population in Gujarat and of civil condition must be admitted to be below the previous standard of accuracy, a degeneration due in the one case to Congress activities and in the other primarily to the indirect influence of the Sarda Act, but also perhaps in some degree to the very same change in the method of sorting and

compiling which has so much improved the return of age unqualified by other factors. In any case the treatment of sociological features of the population of India is much prejudiced by the absence of any general or compulsory registration of births, deaths or marriages; an absence which would go far to nullify social legislation such as that implied in the Sarda Act itself, and to which attention was drawn by the Age of Consent Committee. The difficulties of introducing compulsory registration are no doubt great, but it is not easy to see how social legislation can be really effective without it. Nevertheless some attempt has been made at this census to collect figures for the fertility of females of different social standing and of various occupations in the hope of throwing some much needed light on the rate of reproduction in India. These are censorious days and there were not wanting articles in newspapers of the baser sort to suggest that the figures of fertility were being collected with a view to defaming the people of India. It is possible therefore that critics may be found who will conceive that they detect in Chapters III to VI, or elsewhere in this report, the cloven slots of a considered cloacinity. It is of course impossible to discuss the growth of population without any reference to its health. Those determined to see ill motives will be deterred by no denials, but to those who are not I would offer an assurance (which I hope is not needed) that nothing has been set down in malice. In the first five chapters, except for a page or two on the population problem, I have allowed myself to depart as little as possible from the statistics to be examined (no haunts for Apollo here); in Chapter VI the social movements and legislation of the decade have called for a short digression before returning to the figures in Chapters VII, VIII and IX. In the last three Chapters I have frankly permitted myself, after examining the relative figures, to venture aside to a more speculative treatment of race and religion. What was for long the orthodox view of the history of race and culture in India was brilliantly propounded by Sir Herbert Risley in the Census Report of 1901; the work that has been done since makes it probable that there has been a far greater degree of continuity in the pre-history of India than was then supposed, and certain that India was not characterised, as Sir Herbert believed, by racial or cultural isolation. Much work has to be done before any views on these subjects can claim finality, but certain hypotheses may fairly be advanced on the material accumulated since that census. With the exceptions mentioned I have stayed by my statistics, a valley of dry bones it may be, very far from Helicon, and I no Ezekiel to clothe them with flesh, content if I have played the part of Joab to hope that I may at least escape the unhappy recompense meted out to that early numberer of peoples. At any rate I have made no naughty omission of Levi and Benjamin on purpose, and if some of the tale have gone untold they must be few indeed when the increase alone since 1921 numbers nearly thirty four millions. For the Father of History is proved right again. *Ἰνδῶν δὲ πλῆθος*, he said near twenty-four hundred years ago, *πλείστον ἐστὶ πάντων τῶν ἡμεῖς ἴδμεν ἀνθρώπων* and this census has justified him indeed, for it can be once more stated with some confidence that 'of all the nations that we know it is India has the largest population'.

Simla,

J. H. HUTTON.

June 4th, 1933.



INDIA
RAIN-FALL

REFERENCE FOR LETTERS

- BARODA (B)
- GWALIOR (G)
- CENTRAL INDIA (C.I.)

AMAN
LANDS
I

NICOBAR
ISLAND

REPORT

ON THE

CENSUS OF INDIA, 1931.

CHAPTER I.

Distribution and Movement of Population.

Section i.—Scope of the Report.

I. The area covered by the sixth general census of India is approximately identical with that covered by the census of 1921 and differs little from the area of previous occasions from 1881 onwards;

Geographical Area.

Area covered by the census of India.

Year.	Sq. miles.	Increase.
1881	1,382,624	..
1891	1,560,160	177,536
1901	1,766,597	206,437
1911	1,802,657	36,060
1921	1,805,332	2,675
1931	1,808,679	3,347

and the adjacent islands and islets

Changes in external area since 1921.		
—	Sq. miles.	Population.
Assam	+908	+15,711
Burma	+1,400	+18,327
United Provinces ..	—6	—130
Total net addition	+2,302	+33,908

Bhutan and the French and Portuguese possessions,

—	Area in sq. miles.	Population 1931.	Per-centage of Increase since 1921.
Afghanistan	250,000	7,000,000	..
Bhutan ..	20,000	250,000	..
Nepal ..	54,000	5,600,000	..
French India	196	286,410	+6.24
Portuguese India.	1,461	579,969	+5.79

The statistics therefore cover the whole empire of India with Burma (exclusive of Ceylon and the Maldives) as well as Aden and Perim Island, but not the Kuria Muria Islands* and Sokotra, which is part of the Aden Protectorate, administered from Aden on behalf of the Colonial Office, and not part of British India. The statistics and the tables do not of course cover those parts of the peninsula which are not parts of the British Empire, that is to say. Afghanistan, Nepal, Bhutan and the French and Portuguese possessions, the area and population of which, together with the rate of increase since 1921 where available, are shown in the marginal table. For the rest the scope of this census extended to the whole of the peninsula of India. forming what is commonly described as a sub-continent between long. 61° and 101° E. and lat. 6° to 37°N. Some information has also been included with regard to natives of India resident permanently or temporarily outside the Indian Empire or serving on the High Seas at the time the census was taken.

Obviously within an area of such size, part of which is well within the temperate zone while part is almost equatorial, the diversity of condition both of the population and of its environment must be very great indeed. Geologically, while the peninsula is one of the oldest of the world's formations. the Himalayas are one of the most recent. Not unnaturally therefore there is a great variety of physical feature, varying not only from the loftiest mountains of the world to flats salted by every tide, but from sandy deserts with a rainfall of five inches or less in a year in the north-west to thickly wooded evergreen hills which have never less than 100 inches and here and there get 500 inches of rain or even more in the east and south. Again in northern India there are extremes of temperature—120° of heat dropping to cold below freezing point, while in the south the temperature is almost static

*The population of these islands remains conjectural, and the only information that can be had about them was obtained in 1920 from the Senior Naval Officer at Aden and it is printed in Part III of this Report, since, although out of date, it appears to be the latest information available. The question of the language of Sokotra formerly perhaps written, but now a spoken language only, is of some interest, as are likewise habits and customs of the populations of these islands some of whom in Sokotra are cave dwellers; it is therefore unfortunate from a scientific point of view that no investigation has ever apparently been made.

in its heat and humidity. As might be expected the physical features of the inhabitants are no less variable than those of their environments. Any haphazard collection of Indians will afford types of very different ethnic groups, though the composition would vary according to the locality. The number of languages, as classified by Sir George Grierson in his *Linguistic Survey of India* and exclusive of dialects, is 225 by the returns of 1931. Creeds may be less numerous, but castes, customs and sects must be no less diverse, and the same applies to social, political and economic conditions. Thus the peoples to be covered by this report present every aspect from that of the latest phase of western civilization to that of the most primitive tribes, which, like the Andamanese or like the Kadar or Uralis of southern India, still exist by hunting and collecting forest produce without ever apparently having reached the stage of agriculture at all. Naturally any report of the census of so large and diversified an area must, if it is to be contained in a volume, be of a superficial nature, leaving the closer examination of the figures and facts revealed by enumeration to the reports severally undertaken for each of the Provinces and larger States.

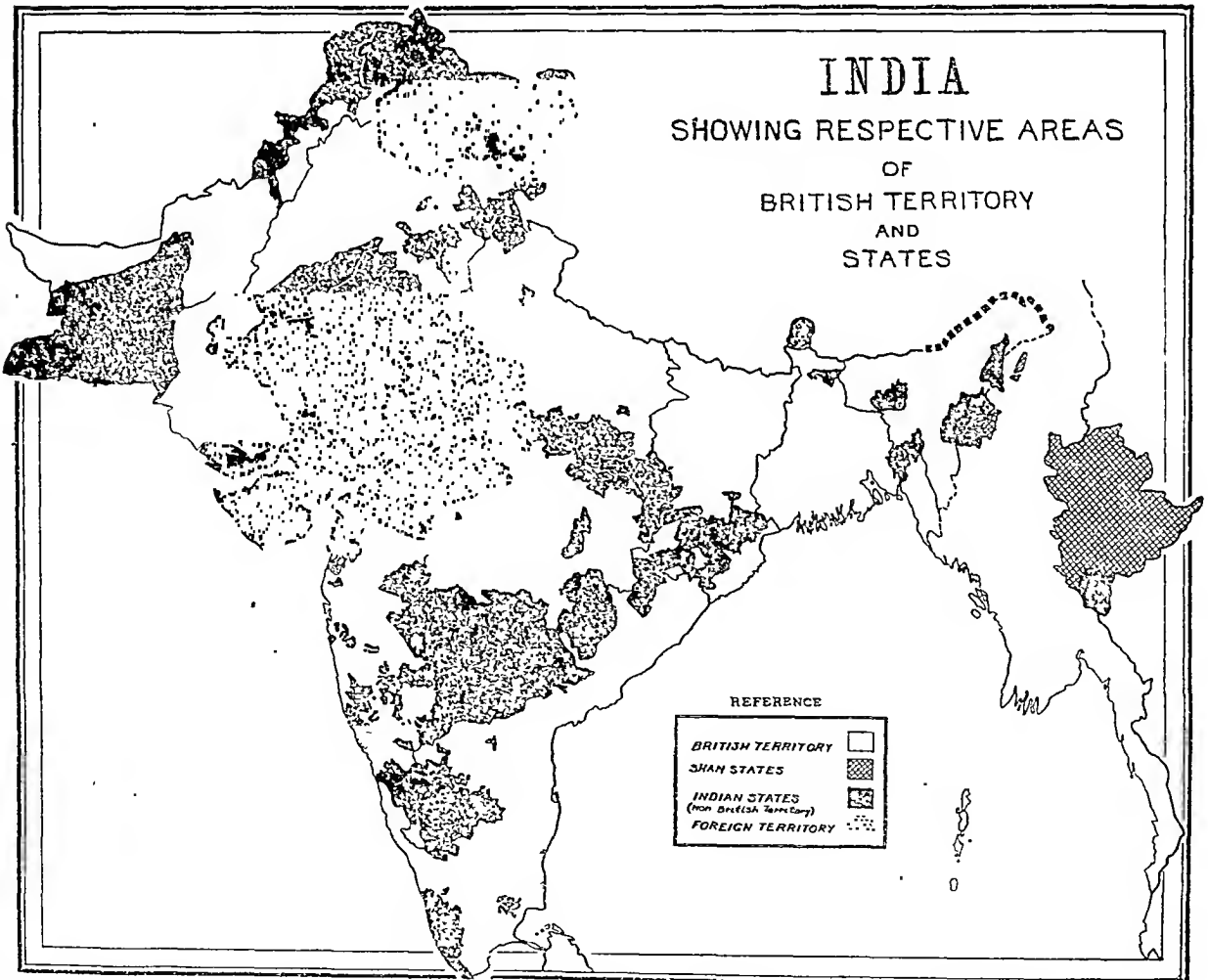
Serial no. of volume.	Parts contained.	Province, etc., treated.	Author.
Vol. I ..	(i). Report; (ii). Tables; (iii). Appendix vol.	India	J. H. Hutton.
Vol. II ..	One	Andamans and Nicobars ..	M. C. C. Bonington.
Vol. III ..	(i). Report; (ii). Tables	Assam	C. S. Mullan.
Vol. IV ..	One	Baluchistan	Gul Muhammad Khan.
Vol. V ..	(i). Report; (ii). Tables	Bengal	A. E. Porter.
Vol. VI ..	One	City of Calcutta	A. E. Porter.
Vol. VII ..	(i). Report; (ii). Tables	Bihar and Orissa	W. G. Lacey.
Vol. VIII ..	(i). Report; (ii). Tables; (iii). Aden	Bombay (with Aden) Aden	A. H. Dracup and H. T. Sorley. D. S. Johnston.
Vol. IX ..	One	Cities of Bombay	H. T. Sorley.
Vol. X ..	One	Western India States Agency	A. H. Dracup and H. T. Sorley.
Vol. XI ..	(i). Report; (ii). Tables	Burma	J. J. Bennison.
Vol. XII ..	(i). Report; (ii). Tables	Central Provinces and Berar	W. H. Shoobert.
Vol. XIII ..	One	Coorg	M. S. Mandanna.
Vol. XIV ..	(i). Report; (ii). Tables	Madras	M. W. M. Yeatts.
Vol. XV ..	One	North-West Frontier Province.	G. L. Mallam and A. D. F. Dundas.
Vol. XVI ..	One	Delhi	Ahmad Hasan Khan.
Vol. XVII ..	(i). Report; (ii). Tables	Punjab	Ahmad Hasan Khan.
Vol. XVIII ..	(i). Report; (ii). Tables	United Provinces of Agra and Oudh.	A. C. Turner.
Vol. XIX ..	(i). Report; (ii). Tables	Baroda State	S. V. Mukerjee.
Vol. XX ..	(i). Report; (ii). Tables	Central India Agency	C. S. Venkatachar.
Vol. XXI ..	One	Cochin State	T. K. Sankara Menon.
Vol. XXII ..	(i). Report; (ii). Tables	Gwalior State	Rang Lal.
Vol. XXIII ..	(i). Report; (ii). Tables	Hyderabad State	Ghulam Ahmad Khan.
Vol. XXIV ..	(i). Report; (ii). Tables	Jammu and Kashmir State ..	Anant Ram.
Vol. XXV ..	(i). Report; (ii). Tables	Mysore State	M. Venkatesa Iyengar.
Vol. XXVI ..	One	Ajmer-Merwara	B. L. Cole.
Vol. XXVII ..	One	Rajputana Agency	B. L. Cole.
Vol. XXVIII ..	(i). Report; (ii). Tables	Travancore State	N. Kunjan Pillai.

2. At the same time in spite of this great variety the existence for the most part of a uniform system of administration and of a fairly general distribution of the different racial types from which the population is drawn, together with a similar, if perhaps less even distribution of religious and social systems, contribute to give a certain uniformity, if not unity, to the whole, which in spite of local differences is obviously capable of a degree of national consciousness which increases with the spread of education. For the difficulty occasioned by great diversity

in treating India as a whole is experienced likewise to a more limited extent in each Province and in most States, since the political boundaries have generally little relation to any other. The difficulty of dealing with the population question by natural divisions is thus greatly enhanced. Obviously the density of the population is in immediate relationship to the conformation of the soil, to the rainfall and to the crops, all of which are inter-dependent, but since the boundaries of administrative units run counter to the divisions of nature, any treatment of the population according to natural divisions is likely to involve the dissipation of figures returned by administrative units into a set of entirely different combinations. This has been attempted for India as a whole on some previous occasions, but the information obtained by such a treatment, however interesting academically, is of little or no administrative value. Demography by natural divisions therefore has been limited to the individual reports of provinces, since in some of the provinces and states the natural divisions are less diverse from divisions political than they are when India is treated as a whole, and within the administrative unit may even be of some practical application.

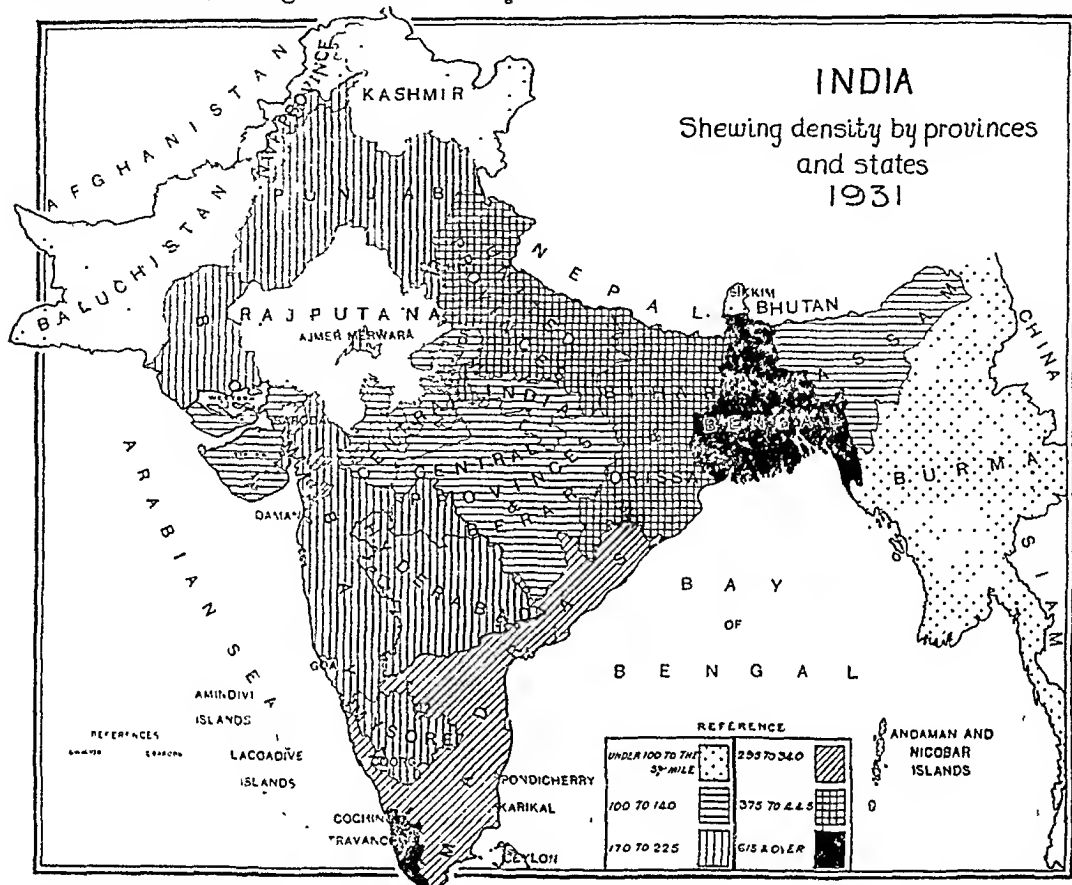
3. In addition to the actual population of India some attempt has been made to give information as to Indian nationals in other countries or on the High Seas. These figures are necessarily incomplete, but perhaps go further than they have done on previous occasions by including returns of Indian crews on ocean-going vessels shipped during the eight months or so that preceded the final enumeration. Though not in India at the time of the census, these crews form a permanent part of the population visiting their homes from time to time and in many cases returning agriculture as a subsidiary occupation. Strictly speaking therefore, although the census in intention is one of the *de facto* population that is of the numbers found in India on February 26th, 1931 and not as in the case of the United States, for instance, a *de jure* population, the terms of a census of actual population have not been observed with excessive punctuality. This indeed would have been impossible, since the remoteness of some parts of India, the difficulty of communications and limitations imposed by water, snow and wild animals make a completely synchronous enumeration of the whole peninsula an absolute impossibility.

External.
population.



*Section ii.—Distribution and Movement.*Area and
Population.

4. The total area covered by this census amounts to 18 hundred thousand sq. miles and the population inhabiting it to 353 millions giving a density for the whole area of 195 persons per sq. mile. This density however is a very variable factor appearing at the lowest as 6.5 persons per sq. mile in the mean density of Baluchistan, Chagai District of which has only one person to the square



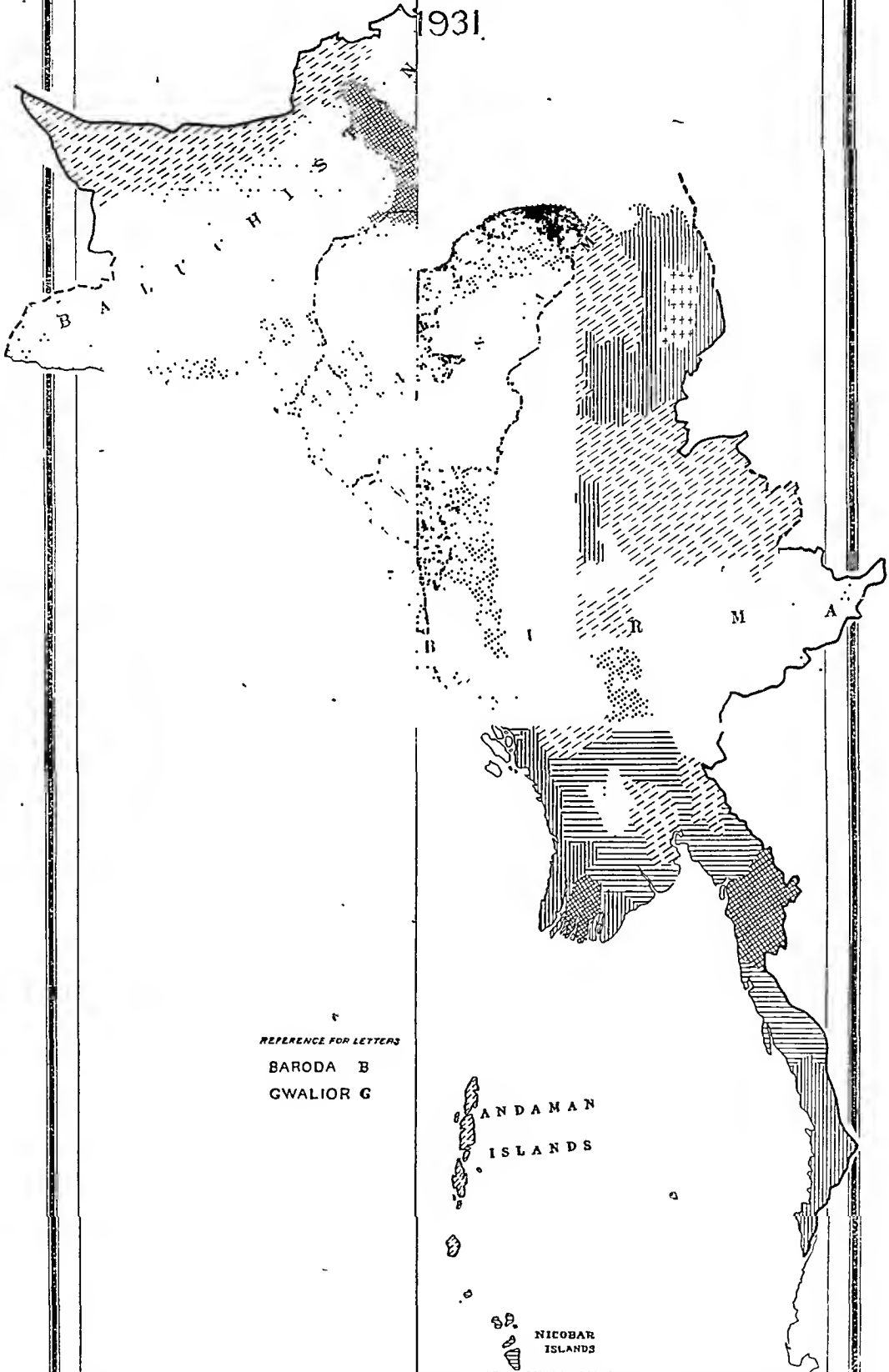
mile, and at its highest at about 2,000 persons per sq. mile in the most thickly populated parts of the south-west coast, the general density of Cochin State, including both the thickly populated coast lands and the almost uninhabited highlands, being 814.2 persons per sq. mile and reaching in one village the amazing maximum found in any purely rural population of over 4,000 persons to the sq. mile. There is, however, in Bengal an even higher general level of density, since the Dacca Division has a mean density of 935 persons for a population of 13,864,104, and reaches a rural density of 3,228 per sq. mile for Lohajang thana, and a mean density of 2,413 for Munshiganj sub-division which has an area of 294 sq. miles. Of the total population 256,859,787 represents the population of British India proper, the area of which is 862,679 sq. miles, and 81,310,845 that of the States with an area of 712,508 sq. miles. British India with Burma has a population of 271,526,933, and the proportion of the population of the States to British India is 23 to 77 when Burma is included. On the other hand if she be excluded it is 24 to 76. It has been already mentioned that the density of the population varies largely according to the rainfall and it may here be pointed out that in the densest areas—those of Cochin, of eastern Bengal, the north-east of the United Provinces and of Bihar, the rainfall is heavier than in any other part of India except Assam, where large tracts of hills and forest reduce the population in proportion to the area, and in southern Burma where there is considerable room for the increase of population and where also there are considerable areas of forest and hills. With India's present population and area we may compare England and Wales with an area of over 58,000 sq. miles and a population of nearly 40,000,000 and a density of 685 persons per sq. mile, or Europe as a whole—area 3,750,000 sq. miles, population 475,000,000, mean density 127 persons per sq. mile, with the United States of America—area 3,027,000 sq. miles, population 123,000,000, persons per sq. mile 41, or China the area of which including Tibet, Mongolia, Chinese Turkestan and Manchuria is estimated at 4½ million sq. miles and the population of which according to the latest estimate, that of Professor Willcox, is 342,000,000 giving a density of

INDIA

MOVING

STATES OF INCREASE

1931



REFERENCE FOR LETTERS

BARODA B

GWALIOR G

ANDAMAN
ISLANDS

NICOBAR
ISLANDS

80·5 persons per sq. mile, though in the fertile areas it is of course much heavier than this. Indeed a more useful comparison should be with China proper, having an area of about $1\frac{1}{2}$ million sq. miles and a general density of probably 200 to 220 persons per sq. mile. It may be added that the total population of the world is now estimated at about 1,850,000,000, and if this be the fact, the population of India forms almost one-fifth part of that of the whole world. It should be added, as regards area, that the Survey of India is now revising the official figures of the area of districts and provinces which will involve some modification of the figures given in the census reports. Revised figures were not ready in time to be utilised generally at this census, but the necessary changes in area and density are for the most part small and unimportant.

5. The actual increase since 1921 is 33,895,298, that is to say, 10·6 per cent. on the population at the last census and 39 per cent. on the population of India fifty years ago and an increase of 12 persons per square mile in 50 years, during which time the increase in area has been principally, if not entirely, confined to comparatively thinly populated areas, and amounts to 426,055 sq. miles. These

Census of	Popula- tion.	Period.	Increase.	Increase due to		Total increase per cent.
				Inclu- sion of new area.	Actual increase of popu- lation.	
1881	.. 253,896,330	1872-81	47,733,970	33,139,081	14,594,889	23·2
1891	.. 287,314,671	1881-91	33,418,341	5,713,902	27,704,439	13·2
1901	.. 294,361,056	1891-01	7,046,385	2,672,077	4,374,308	2·5
1911	.. 315,156,396	1901-11	20,795,340	1,793,365	19,001,975	7·1
1921	.. 318,942,480	1911-21	3,786,084	86,633	3,699,451	1·2
1931	.. 352,837,778	1921-31	33,895,298	35,058	33,860,240	10·6
Total	.. ..	1881-31	98,941,448	10,301,035	88,640,413	39·0

figures may be compared with an increase in England and Wales since last census of only 5·4 per cent., but of 53·8 per cent. in the last 50 years, with an increase in the United States of 16 per cent. since the last census, with an increase of nearly 18 per cent. in Ceylon and with an increase in Java of 20 per cent. since the last census and of as much as 26 per cent. in the outer islands of the Netherlands Indies. The population of Java is of course not comparable with that of India as a whole on account of its small size and limited area, but having (with Madura) the very high density of 817 persons per square mile it is comparable with the more densely populated parts of India already mentioned. This illustrates the fact that the density in India is so variable that it is impossible to consider the question of movement of the population without going into the question of the distribution and variation of density, for density of population in India depends not on industry, as in the United Kingdom, but on agriculture, and is greatest of course in the most fertile areas. At this census, however, the greatest increase is in the States, where generally speaking the density is lowest, and therefore the increase in the population shown by the figures of this census appears at first sight indicative of pressure upon the margin of cultivation, but while the greatest increase has been in Bikaner (41·9 per cent.) this must be put down largely to the increase of irrigation and to the consequent immigration from outside, and one of next highest increases is that of Travancore in which the density was already among the highest in India. The increase in Hyderabad State again is partly to be attributed to an increase of efficiency in the taking of the census and cannot therefore be safely used as a basis of any comparison of the population as it is now and was then. Obviously the greatest increase in population is to be expected in areas such as that of Burma where the rainfall is above the mean and the density of the population below it. Where the rainfall and the density are at balance, that is, where the population is dense and the rainfall is just adequate as in the southern Punjab, eastern Rajputana, United Provinces, Central India generally and H. E. H. the Nizam's Dominions, irrigation has abated the liability to complete loss of crop, and improved communications have made it possible to prevent heavy loss of life in times of scarcity, thus enabling the population to increase on the margin of subsistence. How high a population can be supported by agriculture when conditions are favourable, is shown by Cochin with areas here and there carrying over 2,000 and in one rural unit actually 4,090 persons to the sq. mile on land producing rice and coconuts, but principally the latter which leaves more room for the erection of buildings and brings in a higher return than rice in actual cash. In such areas, *e.g.* Cochin and Travancore, the increase in the population has been higher than in the sparsely

populated areas like Baluchistan or Jaisalmer State where there is no general extension of irrigation, although there would appear to be more scope for an extension of cultivation. On the other hand when these thickly populated areas are examined in detail it appears that the actual rate of increase in population is greatest in the less populated, and less fertile, areas. Thus in Travancore, there are three natural divisions the lowland—very fertile, the midland—less so, and the highlands, where the staple crop is tapioca and where irrigation is not practised. Now in these three natural divisions the density in 1921 was 1,403 persons to the sq. mile, 700 persons and 53 respectively, which increased during the decade to 1,743, 892 and 82, that is by 24·2, 27·4 and 54·7 per cent. respectively, showing a vastly higher rate of increase in the area of least density which is also the area of least fertility, though not as great a numerical increase. Similarly in Bengal the greatest rate of increase has been in the Chittagong Hill Tracts, and in Madras in the Nilgiris. Where, therefore, there is a population already dense, there is a clearly perceptible spread towards the less profitable land.

The increase of population has also been dependent in some cases on migration, while, on the other hand, the apparent increase may have depended on the failure to migrate. Thus the increase of 35 per cent. in Ahmadnagar district, a rather barren upland in the Deccan which suffers from recurring famines, is not due so much to a series of good years or to an extension of cultivation on the subsistence margin, as to trade depression, resulting in numbers of the population staying at home instead of migrating to the ports of Bombay and elsewhere where in normal years they are employed during the census months of February and March. Bombay shows a corresponding decrease, probably due, in the particular case of Bombay, largely to the same cause. Other decreases there are which are not so easy to explain.

Migration.

6. Immigration, when India is taken as a whole, influences the population very little. Table VI shows 730,562 persons as born outside India as against 603,526 in 1921, without taking count in either case of persons born in French or Portuguese possessions. The increase is almost entirely in persons born in Asiatic countries. Against this there must be set off on account of emigration about one million persons who are estimated as having emigrated during the decade under review. Migration, however, is of more importance as affecting internal fluctuations of populations, varying in British India from 1,244,249 (net) immigrants into Assam to 15,536 (net) immigrants into the North-West Frontier Province. These figures however include all those whose birth-place was outside the province, and do not refer to the decade 1921-31 only. If we take the actual increase due to immigration during the decade in Assam it is found to be only 121,648,* consequently if a percentage be taken on the increase of population Assam owes only 10·5 per cent. of its increase to immigration, though its immigration figure is the highest among all provinces. Conversely Bihar and Orissa with the greatest loss by emigration shows an increase of 10·8, a little more than that for all India, in spite of the fact that the total loss by emigration is equivalent to almost a third of the actual figure of increase. Migration as between British India and the States has tended in the past to be from the latter to the former, but during the last decade this position has been reversed and the trend of migration on the whole is from British India to the States, where the density is generally lower. Bikaner, where the immigrants total 161,303, *i.e.*, 58 per cent. of its increase in population, is a striking instance; the greater number of its immigrants (about 54%) come from British India, and while the natural increase of the population of Bikaner State *plus* the normal immigration as recorded in 1921 would have resulted in a general increase of 28 per cent. and thereby brought the population back to the 1891 level merely, the increase at this census is much in excess of that amount, and this excess may be put down entirely to the extension of irrigation.

Mortality.

7. Another factor to be considered is the relation of the birth-rate to the death rate and this factor is far from being the same in different sections of the population. How far the fecundity of different races and castes in India is the result of environment and how far it may have become an inherited racial trait fixed at some period in the past history of the people, and how far it depends on prevailing social practices, is extremely difficult to determine in the light of the existing information, but it is easy to show that there is marked variation in different parts of India and

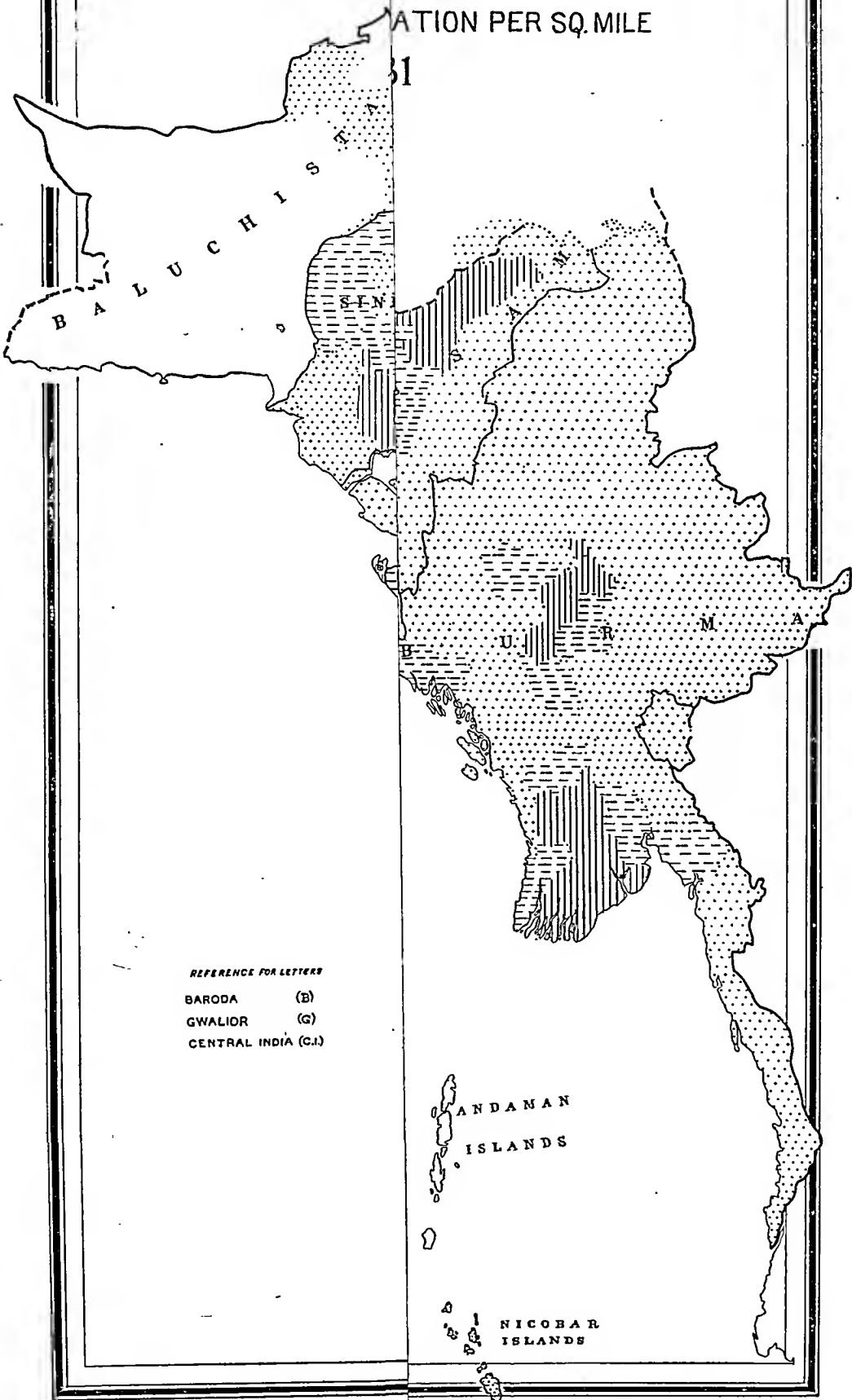
* *Vide Assam Census Report, 1931, page 11.*

INDIA

ING

ATION PER SQ. MILE

31



REFERENCE FOR LETTERS

BARODA (B)
GWAJIOR (G)
CENTRAL INDIA (C.I.)

ANDAMAN
ISLANDS

NICOBAR
ISLANDS

this question will be reverted to in the chapters on age and sex. Meanwhile it is enough to point out that in India the birth rate is everywhere much higher than in Europe, largely on account of the universality of marriage, the Parsis being perhaps the only Indian community in which late marriage and small families are the rule instead of the exception. The birth-rate is lower among the Hindus than in most of other communities probably to some extent on account of the general disapproval of widow remarriage, resulting in larger numbers of women being un-reproductive at the child-bearing age, and to some extent on that of the greater prevalence of immature maternity. On the other hand, the high birth rate of India is largely discounted by a high death rate, particularly among infants as also apparently among women at child-birth. Here again social factors have to be reckoned with, the custom of purdah perhaps exercising its worst effect among the poorer class of Muslims who appear to be more rigid in its observance than the corresponding class of Hindus. This effect is particularly noticeable in crowded urban areas, in which the space available to a woman in purdah and poor circumstances is so small as seriously to affect her health. In the matter of epidemics and of deaths from famine or want, the decade has been particularly favourable to an increase in population. It is true that the influenza epidemic at the end of the previous decade is believed to have fallen most severely on the most reproductive ages and should therefore have had a much more lasting effect than the reduction caused by famine which takes the oldest and the youngest first. There has, however, been no serious famine in the decade under review, and every year sees improved methods of fighting such epidemics as cholera, plague or *kala azar*. Indeed a completely effective treatment for the latter pest has been perfected since the last census, and has made it possible to stamp out the disease. The antimony treatment of *kala azar* was discovered as early as 1913, but the original treatment took three months to apply and therefore did little to prevent the epidemic. The treatment with organic antimony compounds, introduced about 1917, reduced the period of treatment to a month. The improved treatment introduced during the 1921-31 decade however cures the disease in ten days or even less.

Comparison between deduced and enumerated population.

Province (British Territory only).	Variation 1921-1930 according to Vital Statistics (excess of births over deaths +, deficiency -).	Variation 1921-1931 according to Census (excess +, deficiency -), total population.	Difference Excess or defect of column 3 on column 2.	Population under registration 1921.	Difference per cent. of population under registration.†
1	2	3	4	5	6
Assam	+450,854	+1,163,123	+712,269	6,852,242	+10.39
Bengal	+1,463,484	+3,411,695	+1,948,211	46,522,293	+4.19
Bihar and Orissa	+3,254,095	+3,682,158	+428,063	34,004,546	+1.26
*Bombay	+1,728,161	+2,587,404	+859,243	19,165,614	+4.48
Burma	+715,458	+1,454,954	+739,496	10,822,618	+6.83
Central Provinces and Berar.	+1,423,608	+1,594,963	+171,355	13,912,760	+1.23
Delhi	+53,132	+147,794	+94,662	500,539	+18.91
Madras	+4,398,902	+4,421,122	+22,220	41,002,696	+0.05
North-West Frontier Province.	+94,759	+173,736	+78,977	2,135,573	+3.70
Punjab	+2,428,382	+2,895,374	+466,992	20,517,606	+2.28
United Provinces	+3,927,768	+3,033,694	-894,074	45,375,787	-1.97
Total	+19,938,603	+24,566,017	+4,627,414	240,812,274	+1.92

* Excludes Aden.

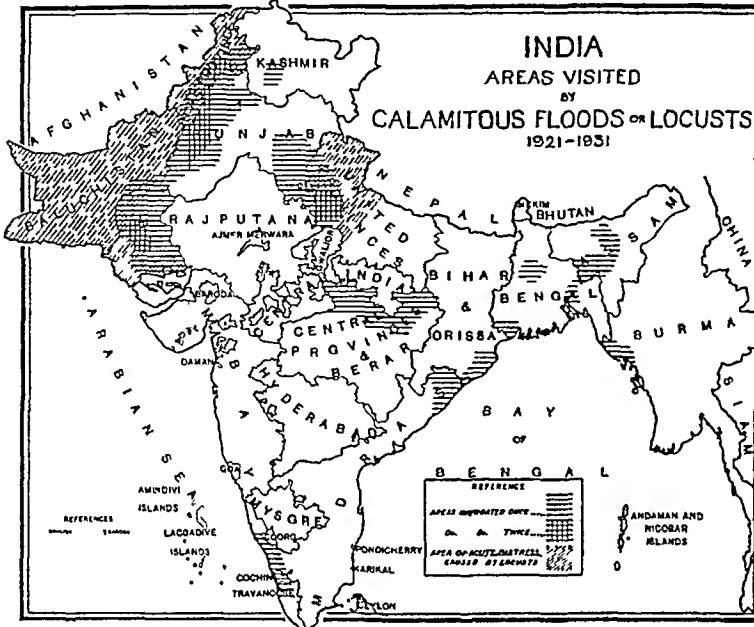
† The variation shown in this column would of course be less in the case of excesses or more in the case of deficiency had the population under registration shown in column 5 been annually adjusted by deducting reported deaths and adding reported births.

A brief reference to vital statistics will be found in Section 76 (Chapter IV) below. In view of the admitted inaccuracy of these statistics in many provinces, the discrepancy between the 1931 population as it should have been according to those statistics and as it was found to be by the census is no cause for surprise. The figures are shown in the marginal table, and a calculation of the intercensal population will be found at the end of the chapter in subsidiary Table III, while subsidiary Tables VIII to XI contain additional material with reference to vital statistics.

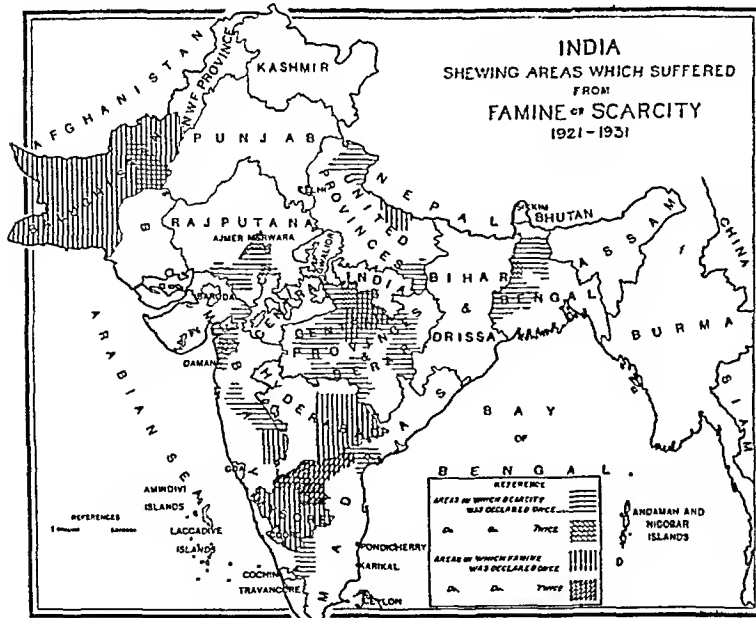
8. As regards scarcity, improvements in communications, and consequently in ease of distribution, nowadays prevent anything like the famine mortality

Economic.

of a century ago, while taking India as a whole the decade ending in 1931 was a prosperous one in the matter of crops, the general economic depression that has supervened having been little apparent outside one or two restricted areas until 1931 itself, so that for a population mainly agricultural the conditions have been very favourable to an increase in population. Nevertheless the decade opened, as it has since closed, in gloom. The frontier was disturbed; the Moplahs were in rebellion; there was trouble in the Madras Agency tracts; the effects of influenza and the bad monsoon of 1920 were still active; trade was depressed; prices were high; finances were embarrassed, and the non-co-operation movement was rampant. From this position there was a rapid recovery; a series of good harvests followed



almost all over India. In Bengal there were floods, it is true, and floods proved to be the principal cause of local distress and scarcity during the decade in India generally, as no province completely escaped the inundation of some portion in the ten years under review. But taking India as a whole the first five years were generally above



the average, or little below it. Famines were local and not very serious, though one unfortunate district in Madras had famine declared in it officially in three seasons. Almost to the end of the decade the prices of cotton remained consistently remunerative. The end of the decade showed the most deterioration from this average of agricultural prosperity. Scarcity in some parts, e.g., in the United Provinces, and the heavy fall in the prices of agricultural produce recreated a position not unlike that of the beginning of the decade, but with the additional embarrassment of a population greatly increased by the intervening prosperity. Wages however did not fall as rapidly as prices, and up to the time of the census agricultural

Above all a number of large schemes of irrigation and hydro-electric power development have been completed, particularly in the north-west and south of India. Public health has been exceptionally good during the decade; cholera and plague took much less than their usual toll of life, and *kala-azar* was suppressed by the perfection of an easy cure. The general rise in prosperity throughout the decade is indicated by the comparative deposits in savings banks and state of co-operative societies in 1921 and 1931, tables of which are given in the statements below:—

Post Office Circle.	Post Office Savings Bank Deposits.					
	No. of Banks.		No. of accounts.		Amount of deposits in rupees.	
	1920-21.	1930-31.	1920-21.	1930-31.	1920-21.	1930-31.
Bengal and Assam	2,740	3,141	528,427	615,785	5,27,34,019	8,99,83,627
Bihar and Orissa ..	895	1,037	124,361	158,943	1,26,42,858	2,55,71,070
Bombay* ..	1,627	1,823	375,170	333,793	4,85,15,721	5,66,65,593
Burma ..	362	511	70,017	87,246	72,84,237	1,26,25,298
Central ..	801	1,234	95,569	129,045	1,27,62,966	2,10,15,173
Madras ..	1,838	2,279	207,675	380,358	1,40,38,563	2,56,08,800
Punjab and N.-W. F. P.†	997	1,076	241,494	358,563	4,48,87,062	6,76,83,111
United Provinces ..	1,453	1,485	235,244	347,269	3,57,68,516	5,90,40,642
Sind and Baluchistan ..	260	..	66,611	..	..	1,20,66,560
Total ..	10,713	12,846	1,877,957	2,477,613	22,86,33,942	37,02,59,874

* Includes Sind in 1920-21 only.

† Includes Baluchistan in 1920-21 only.

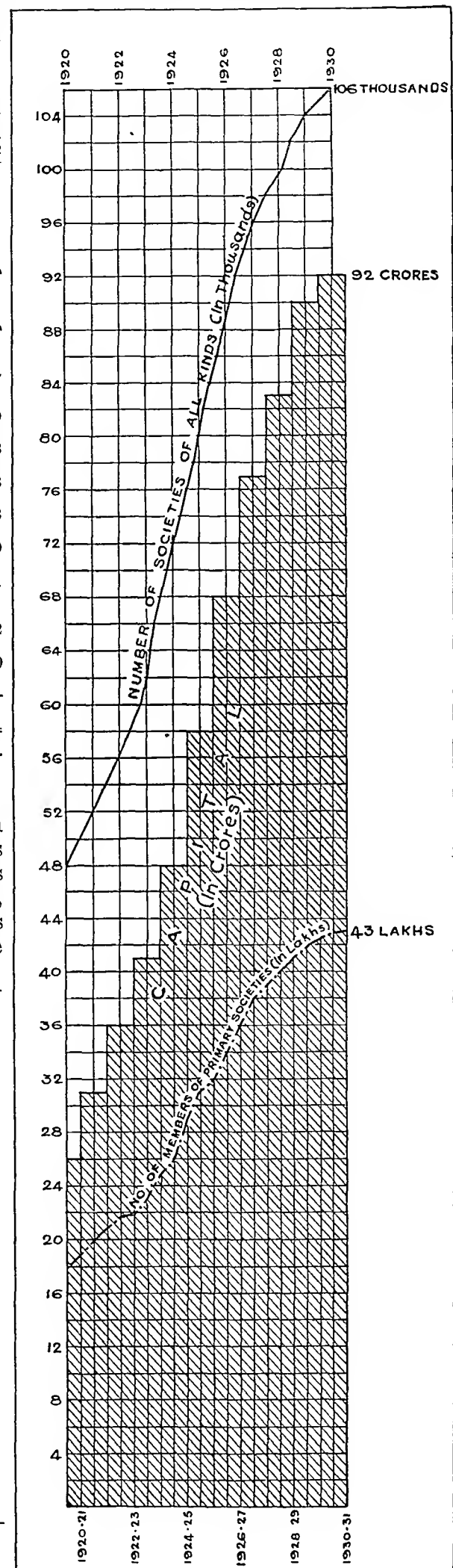
The number of Co-operative Societies has more than doubled during the decade, which opened with 47,503 societies and closed with over 100,000, while the number of members of primary societies increased from 1,752,904 to 4,308,262, of whom more than two-thirds are agricultural. Five states which did not appear at all in the statements of 1920-21 have

Post Office Circle.	Five-year Cash Certificates Issue.				Cash price realised from certificates.	
					In 1920-21.	In 1930-31.
					Rs.	Rs.
Bengal and Assam	13,25,583	1,69,42,242
Bihar and Orissa	2,72,753	39,59,736
Bombay	13,72,843*	2,79,81,653
Burma	1,85,628	24,56,292
Central	3,01,080	80,80,370
Madras	2,90,114	69,37,890
Punjab and N.-W. F. P.	7,25,353†	2,63,83,786
United Provinces	7,13,908	1,53,60,699
Sind and Baluchistan	97,24,748
Total	51,87,262	11,78,27,416

* Includes Sind.

† Includes Baluchistan.

PROGRESS OF THE CO-OPERATIVE MOVEMENT IN INDIA 1920-21 to 1930-31



been added to the returns of 1930-31, *viz.*, Cochin, Gwalior, Indore, Jammu and Kashmir and Travancore. It will be seen therefore that inspite of the decline at the end of the decade into a condition of low prices, trade depression non-co-operation and rebellion, this time in Burma, similar to that with which the decade opened if not worse, there still remained at its close many of the economic benefits accumulated during the interval, though they are subject to the greatly enhanced liability of the additional population of approximately 34 millions to the propagation of which the prosperous years had so greatly contributed.

Province or State.	Total no. of societies.		Number of members (primary societies).	
	1920-21.	1930-31.	1920-21.	1930-31.
India	47,503	106,166	1,752,904	4,308,262
British Provinces	43,366	90,064	1,600,476	3,681,300
Ajmer-Merwara	522	654	17,296	18,608
Assam	560	1,413	23,084	69,569
Bengal	6,366	23,614	232,001	760,812
Bihar and Orissa	3,580	9,404	107,514	254,462
Bombay	2,956	5,896	265,629	572,669
Burma	4,888	2,972	125,318	85,741
C. P. & Berar	5,011	4,109	79,638	76,615
Coorg	142	253	6,565	14,037
Delhi	103	275	2,011	7,795
Hyderabad (Administered Area)	5	18	205	6,173
Madras	6,287	14,878	395,284	970,745
N.-W. F. P. .. .. .	..	257	..	7,722
Punjab	8,453	20,698	230,311	670,616
United Provinces	4,493	5,623	110,620	147,736
States	4,137	16,102	152,428	626,962
Baroda	509	1,047	16,932	37,321
Bhopal	691	1,189	10,446	20,611
Cochin .. .. .	..	210	..	24,328
Gwalior .. .. .	..	4,071	..	70,307
Hyderabad	1,437	2,157	35,293	53,120
Indore .. .. .	..	506	..	13,366
Kashmir .. .. .	..	2,899	..	54,222
Mysore	1,500	2,213	89,757	134,428
Travancore .. .. .	..	1,810	..	219,259

Province or State.	Share capital paid up.		Loans and deposits held at the end of the year.		Reserve and other Funds.		Total.	
	1920-21.	1930-31.	1920-21.	1930-31.	1920-21.	1930-31.	1920-21.	1930-31.
(In thousands of rupees.)								
India	4,05,25	12,40,83	20,23,02	69,18,27	2,14,66	10,82,12	26,42,93	91,91,22
British Provinces	3,53,59	10,60,16	18,87,90	63,92,31	1,99,40	9,07,08	24,40,89	83,59,56
Ajmer-Merwara	7,04	6,73	32,53	30,90	2,85	9,67	42,47	47,30
Assam	2,36	8,09	12,17	59,94	2,31	10,01	16,84	78,04
Bengal	42,28	1,98,92	2,64,63	12,04,27	26,37	1,59,32	3,33,28	15,62,51
Bihar and Orissa	10,57	56,42	1,02,10	4,77,60	10,27	54,88	1,22,94	5,88,90
Bombay	46,18	1,77,46	2,70,62	11,08,35	17,77	1,04,91	3,34,57	13,90,72
Burma	55,23	83,78	2,23,25	1,05,19	28,42	75,07	3,06,90	2,69,04
Central Provinces and Berar.	26,49	34,57	2,56,87	4,30,99	16,14	66,17	2,99,50	5,31,73
Coorg	99	2,75	53	5,81	60	2,47	212	11,03
Delhi	13	2,59	82	20,37	..	2,11	95	25,07
Hyderabad (Ad- ministered Area)	19	1,96	11	3,10	..	26	30	5,32
Madras	64,87	2,42,16	4,07,66	14,39,78	13,37	1,27,94	4,90,90	18,09,88
N.-W. F. P. .. .. .	..	2,08	..	10,44	..	43	..	12,95
Punjab	69,52	1,81,15	2,33,03	13,72,21	57,99	2,50,93	3,60,54	18,04,29
United Provinces	27,74	56,51	83,53	1,23,36	18,31	42,91	1,29,58	2,22,78
States	51,66	1,80,66	1,35,12	5,25,96	15,26	1,25,04	2,02,04	8,31,66
Baroda	1,85	5,80	21,08	59,45	2,78	9,69	25,71	74,94
Bhopal	29	1,31	11,23	14,90	18	8,36	11,70	24,57
Cochin .. .. .	..	3,03	..	15,15	..	3,06	..	21,24
Gwalior .. .. .	..	15,03	..	56,06	..	20,53	..	91,62
Hyderabad	15,17	45,41	65,91	1,39,62	5,36	23,12	86,44	2,08,15
Indore .. .. .	..	3,51	..	37,70	..	13,46	..	54,76
Kashmir .. .. .	..	24,42	..	56,74	..	16,57	..	97,73
Mysore	34,35	48,89	36,90	1,16,34	6,94	24,09	78,19	1,89,32
Travancore .. .. .	..	33,26	..	29,91	..	6,16	..	69,33

Section iii.—Provincial distribution and variation.

9. Ajmer-Merwara is a small province with an area a little less than that of Co. Cork or a little more than that of Devonshire and a population of little more than that of all Connaught or of Midlothian. It is administered by a Commissioner under the Agent to the Governor General in India for Rajputana, by the States of which it is entirely surrounded, and consists of the city and sub-division of Ajmer, the adjacent but detached sub-division of Kekri,

Ajmer-
Merwara.

				Variation of population per cent.								
				Area in sq. miles.	Population.	Density.	1881 to 1891.	1891 to 1901.	1901 to 1911.	1911 to 1921.	1921 to 1931.	1881 to 1931.
Ajmer-Merwara	..	..	..	2,711	560,292	207	+17·7	—12·1	+5·1	—1·2	+13·1	+21·6
Ajmer and Kekri	..	..	..	2,070	423,918	205	+17·6	—13·0	+3·5	—0·4	+11·9	+18·0
<i>Ajmer City</i>	..	..	..	17	119,524	7,031	+41·3	+7·3	+16·8	+31·7	+5·3	+145·3
Merwara	..	..	..	641	136,374	213	+18·3	—8·8	+10·6	—3·9	+17·2	+34·4

and the tahsils of Merwara, the ancient domain of the Mers, as well as small detached areas which are included in one or other of these units. The population, though the highest yet recorded, only exceeds that of 1891 by less than 18,000 persons. The present census shows an actual increase of 13·1 per cent. for the decade, which probably represents a natural increase of 16·6 per cent. since the 1921 population was swollen by the Khwaja Sahib's 'Urs. The agricultural produce of Ajmer and Merwara is not enough to support its population and some 360,000 maunds of grain are imported annually. Railway workshops in Ajmer employ many hands.

10. Of the Andaman and Nicobar Islands, which form the charge of a Chief Commissioner directly under the Government of India, the islands of Great

Andaman
and Nicobar
Islands.

Administrative and Natural Division.	Area in square miles.	Popu- lation.	Density.	Variation of population per cent.					
				1881 to 1891.	1891 to 1901.	1901 to 1911.	1911 to 1921.	1921 to 1931.	1901 to 1931.
Andaman and Nicobar Islands.	3,143	29,463	9·37	..	..	+7·3	+2·4	+8·8	+19·5
Andamans	2,508	19,223	7·66	+6·7	+16·2	—2·7	+1·0	+7·9	+6·0
Nicobars	635	10,240	16·1	..	..	+35·4	+5·1	+10·4	+57·3

Andaman are in the process of development from a penal to a free settlement, the aboriginal population being far on the road to extinction. The density of the Andamans is

7·66. Sentinel Island and Little Andaman are still inhabited by Andamanese only, and the Nicobars are likewise occupied almost entirely by Nicobarese except for a few foreign traders, who come to the islands for pearl shell, *bêche-de-mer* and coconuts, by an Assistant Commissioner and by a few police. The density of the Nicobars is 16·1 persons per square mile. The convict population which was and is by far the most numerous element in the population of the Andamans has been much reduced on account of the policy of abolishing transportation to the Andamans. The figures of the foreign population, including convicts and *ex*-convicts, show a steady increase of Burmese and Karens. The climate suits them and they are accustomed to similar surroundings and the indications are that the permanent population of the islands will ultimately be predominately Burmese.

The most striking figures for these islands are those for the indigenous Negrito population which has shown a decrease respectively of 42, 30, 40 and 41 per cent. at each successive census of this century and a total decrease of over 75 per cent. since 1901 alone. If the present rate of decrease continue much longer the Andamanese will be extinct by the end of this century. The Census Superintendent in his report is content to damn with faint praise the policy of civilizing the aborigines and the institution of the 'Andaman Home', but that policy, now abandoned, resulted in the space of 7 decades in a greater curtailment of human life than the Andamanese themselves are likely to have effected by their more direct methods

in as many centuries. In the Nicobars on the other hand, whence the penal settlement was removed in 1888, there has been an increase of 10·4 per cent. since 1921 in spite of the deficiency of females, who are only 881 to every 1,000 males. The ratio of females to males has increased by 112 per mille since 1921 when the ratio was 769 females per 1,000 males, and by 40 per mille during the present century. If Nicobarese of tribal religion alone be examined the increase in the sex ratio is from 866 females per 1,000 males in 1921 to 939 in 1931.

Assam.

11. Assam with a present population of a nine and quarter million shows an increase since 1921 of 15·7 per cent. The decade from the point of view of public health has been "the best in the history of Assam", and the tea industry, which is, of course, the main industry of the province beyond ordinary agriculture, was on the whole in a flourishing condition, starting the decade with a recovery from the depression of 1919-1921, booming in 1923 and 1924 and remaining prosperous until the end of 1927, when the present depression began to be felt as a result of foreign competition and over-production. The increase in population, in spite of being the highest recorded in Assam, has been mainly due to natural increase and not to an increase by immigration which only formed ten per cent. of the total. The general economic condition of the cultivator does not seem to have deteriorated up to 1929 in spite of a general tendency to decay on the part of the cottage industries. Up to that year the price of agricultural produce had increased and expenditure on luxuries was found by the Assam Banking Enquiry Committee to have increased likewise. The standard of living had gone up, and so also apparently had expenditure on marriage and other ceremonies. This had involved increased indebtedness and "the average agriculturalist has not learned the importance of saving". The increase in population has extended to the whole province, Hills and Plains districts alike, but is lowest in the Surma Valley, which is the most densely populated part and but little affected by migration. The area of the province has been slightly extended on the frontier towards Burma, but that extension of area has only accounted for 1·25 per cent. of the increase. The area of Assam is 67,334

Provincial and Natural Divi- sions.	Area in square miles.	Popu- lation.	Density.	Variation of population per cent.					
				1881 to 1891.	1891 to 1901.	1901 to 1911.	1911 to 1921.	1921 to 1931.	1881 to 1931.
Assam ..	67,334	9,247,857	137	+ 6·8	+11·8	+15·2	+13·2	+15·7	+ 80·3
Brahmaputra Valley ..	27,692	4,723,293	171	+10·0	+ 5·8	+18·7	+24·1	+22·5	+109·8
Surma Valley	7,450	3,262,029	438	+11·5	+ 5·3	+10·8	+ 3·3	+ 7·2	+ 44·1
Hills	32,192	1,262,535	39	-22·1	+77·7	+18·5	+ 8·2	+15·6	+105·3

square miles and its population is 9,247,857 having a mean density of 137 to the square mile. This density, however, is a very variable matter. In the Surma Valley the density is 438 per square mile, and nat-

turally the increase in population has been least in this area. In the Brahmaputra valley it is 171, and it is in this area that immigration is most active; in the Hills, which generally speaking afford a scanty subsistence to scattered villages, the density is only 39. There are no industrial towns in the province of any size or importance. The population is of a very mixed character. In the Brahmaputra valley the indigenous population consists of Bodo and Shan tribes mostly Hinduised, and with an aristocracy of caste Hindus ultimately of foreign extraction but, like the small Muslim population settled in the 17th century, completely identified with the country and the people of the valley by a residence of many generations. The recent immigrants consist either of tea garden coolies, mostly aboriginals from the Madras Agency Tracts, the Central Provinces and Chota Nagpur, who take up land and settle down in the country, and of Muslim cultivators from Maimansingh District in Bengal who have of recent years swarmed into the lower districts of the valley and opened up large areas of waste land. Prolific breeders and industrious cultivators but unruly and uncomfortable neighbours, these immigrants threaten to swamp entirely the indigenous inhabitants and in the course of two or three decades to change the whole nature, language and religion of the Brahmaputra valley and to assimilate it to the Muslim areas of Sylhet, where the population is not Assamese but essentially Bengali, whether Muslim or Hindu. In the other district of the Surma Valley, the plains part of Cachar, the last stronghold of the Kachari kings and once completely Kachari

in character, has become a Bengali colony entirely submerging the indigenous Kachari, who has retained his tribal nationality only in the North Cachar Hills. There as in the rest of the Hill districts the indigenous tribes still hold their own, resentful of the intrusion of the plainsmen whether Bengali or Assamese and maintaining their own languages and distinctive cultures and racially belonging for the most part to Burma rather than to India.

12. Baluchistan, the most sparsely populated of any province of India, occupies an important strategical position between Afghanistan, India and Persia, while the peninsula and immediate hinterland of Gwadar on its south-west coast is in the possession of the Sultan of Muscat and excluded from the scope of the Census of India. The province consists of British Baluchistan, of Agency Territories, of Tribal areas and of the States of Kalat and Las Bela; the Agency Territories are grouped with British Territory for administrative purposes and include

Baluchistan.

Administrative Unit.	Area in square miles.	Population.	Density per square mile.	Variation of population per cent.			
				1901 to 1911.	1911 to 1921.	1921 to 1931.	1901 to 1931.
Baluchistan ..	134,638	868,617	6	+3.0	-4.2	+8.6	+7.1
British Territory	9,084	136,793	9	+9.3	+1.1	+6.7	+17.7
Agency Territories.	37,864	271,491					
Tribal Areas ..	7,280	55,224	8	+1.3	+6.3	+45.5	+56.7
States ..	80,410	405,109	5	-1.9	-9.8	+6.9	-5.5
Kalat ..	73,278	342,101	5	-3.6	-8.6	+4.2	-8.2
Las Bela ..	7,132	63,008	9	+9.1	-17.2	+24.3	+12.3

four tahsils held on lease from the Khan of Kalat. British Baluchistan covers 7 per cent. only of the total area of the province and contains 16 per cent. of the total population, but these figures become 40 and 53 respectively if all the areas under British administration

area added to what is strictly British territory. In an area so scattered that the charge of a single enumerator involved the travelling of distances of from 50 to 150 miles, a generally synchronous census was obviously an impossibility, and, the regular synchronized census on the standard schedule covered only 200 square miles and a population mostly alien. The difficulties of obtaining an accurate census are further enhanced by the nomadic character of the population, which is constantly moving from one part of the country to another in search of pasturage or work, and by the periodic movements not only of the local population towards Sind, Afghanistan or Persia in the autumn, but also of foreign nomads from Afghanistan into and through Baluchistan in the winter. These nomads return in the spring, and in the summer Quetta with its cool climate is becoming a seasonal resort from the overbearing heat of Sind. The census therefore of Baluchistan is a census of her winter population and does not necessarily represent with any accuracy the population to be found there in the summer months, which the Census Superintendent estimates at 974,000. The mean density of Baluchistan is 6 persons per square mile, a little more than Tibet with 4 and about the same as Newfoundland exclusive of Labrador; but this density falls in the Chagai district to 1 person per square mile. The decade started with a period of famine resulting from the drought of 1920-21 and although the years 1923-25 were good the later years were afflicted by locusts and the decade as a whole was below the usual level of prosperity. As a result of famine and scarcity and of the damage done by the invading sands of the Chagai deserts, which bury and lay waste the cultivated areas to the south and east of them and choke both sources and channels of irrigation, the province lost some thousands of its scanty indigenous population by migration. Prices ruled high until 1930 when they fell to a level phenomenally low. Health was poor and to the disease which naturally follows famine conditions were added serious epidemics of cholera, small-pox and measles. A general increase of motor traffic has almost caused the disappearance of animal-drawn vehicles during the decade, and 132 miles have been added to railways. The population increased by 69,000, of which 39,500 represents a natural increase, but the phenomenal increase of 45.5 per cent. in the Tribal Areas is not entirely beyond suspicion, and if the natural population of Baluchistan be alone considered, the 1911 figure has not yet been recovered. The population is far from uniform in character comprising as it does Brahui, Baloch, Lasi and Makrani with their satellite tribes of Loris, Dehwars, Langahs and Naqibs to say nothing of Pathans and Jatts and Persians. The country is of great historical importance

and the researches in recent years of Sir Aurel Stein indicate that Baluchistan was once a fertile country supporting a large population, where it now offers a scanty subsistence steadily dwindling under the encroaching sand.

Bengal. 13. Bengal, ninth of the provinces of India in area, is first in respect of population. The British districts cover 77,521 sq. miles, exclusive of large surfaces of river and estuary, and the Bengal States 5,434. To these for census purposes was added Sikkim State, another 2,818 sq. miles. Thirty sq. miles have been added since 1921 from Bihar and Orissa but changes in calculation of area have increased the size shown in the tables by an additional 678 sq. miles. The total population returned is 51,087,338 for Bengal (of which 50,114,002 were in British and 973,336 in State territory) and 109,808 for Sikkim, the population of Bengal being more than one-sixth of the total for British India. The density in British Bengal is now 646 persons per sq. mile, while that of Sikkim is only 39. Excluding Calcutta the density of Bengal varies from 2,105 in Howrah district to 43 in the Chittagong Hill Tracts, but by far the greater part of the province has a density of over 500 to the sq. mile, and if smaller units are taken a much higher rural density is found in many places, Dacca Division having a mean density of 935, Munshiganj sub-division of 2,413, and Lohajang thana of 3,228 per sq. mile. The rate of increase of population has been 7.3 per cent. since 1921 and that of Sikkim 34.4 per cent. Cooch Behar State is one of the few in India that shows a decrease since 1921. This decrease, 0.27 per cent., is entirely Hindu (—4.76%) and is attributed to the expansion of settled cultivation by Muslims which has the effect of driving the Hinduised tribes, Koch, Mech, Poliya, etc., into the foothills or eastwards into Assam, a process observed likewise in the adjoining Bengal districts. It is also suggested that this decrease is partly due to changes in social custom, such as the abandonment of widow remarriage as part of a campaign of social elevation, and to changes in environment unfavourable to pre-existing adaptations. Tripura State on the other hand, with only 93 persons to the sq. mile, has experienced an increase of 25.6 per cent., and the thinly populated Chittagong Hill Tracts one of 22.9 per cent. Conditions during the decade from the economic standpoint are de-

Province or State.	Area in sq. miles.	Population.	Density.	Variation of population per cent.					
				1881-1891.	1891-1901.	1901-1911.	1911-1921.	1921-1931.	1881-1931.
Bengal	82,955	51,087,338	616	+7.5	+7.7	+8.0	+2.8	+7.3	+38.0
British Districts ..	77,521	50,114,002	646	+7.6	+7.8	+7.9	+2.7	+7.3	+38.0
Cooch Behar State ..	1,318	590,886	448	—3.9	—2.1	+4.6	—0.1	—0.3	—1.9
Tripura State	4,116	382,450	93	+43.7	+26.1	+32.5	+32.6	+25.6	+299.9
Sikkim	2,818	109,808	39	..	+93.8	+49.0	—7.1	+34.4*	+260.5

* 1891—1931.

scribed as having been "not entirely unsatisfactory". Harvests have been generally good and prices high until 1929, though there have been severe floods in three years, some cyclones and an earthquake. Wages were high till 1930, but their high level was of little benefit to middle class families with fixed incomes, and it was the skilled workman who reaped the most benefit. In industry cotton mills have been prosperous throughout, and jute until 1929; tea was prosperous till 1927; coal has not been prosperous. Throughout Bengal there seems to have been a general rise in the standard of living, not shown in an improved or more expensive diet, though it is reported that the need for a better balanced dietary is indicated by the fact that an ordinary cultivator is found to improve and gain weight on prison fare, but in minor amenities such as umbrellas and shoes, shirts and coats "now worn by thousands who would never have dreamt of wearing them ten years ago", while the hurricane lantern is almost universally displacing the indigenous oil lamp. In some areas union boards are taking advantage of their powers to tax the union for schemes of village improvement such as the clearing of jungle, maintenance of roads and the excavation of tanks or wells. On the other hand increased earnings have not led to any reduction of the indebtedness of the ryot or labourer. The average debt of an agricultural family seems to be about Rs. 180 and that of a non-agricultural one perhaps a little more, while the average debt of the total population is about Rs. 166 per household. The debts of members of co-operative societies have increased by 3.5 per cent. to which borrowing to forestall the Sarda Act has largely contributed.

In an interesting examination of the population question printed as an appendix to this chapter the Census Superintendent reaches the conclusion that Bengal might have a population of some 53 millions in 1941, and that the maximum population will be from 68 to 74 millions ; that the Hindu population has passed the point at which the rate of increase accelerates in successive decades and is approaching a stationary population, whereas the Muslim population has not yet progressed so far along its present cycle of growth but will ultimately be to the Hindu as 4 to 3 ; and that Bengal could support at the present standard of living nearly double its present population.

14. Bihar and Orissa has a heterogeneous population of 42,329,583 in an area of 111,702 sq. miles giving a mean density of 379 per sq. mile, of which 28,648 sq. miles consist of feudatory States which contain more than 4½ millions of the population. The increase of the province has been 11·5 per cent. since 1921. The population falls naturally into three areas which do not correspond to its administrative divisions, that is into Bihar (exclusive of the Santal Parganas), the Chota Nagpur plateau together with the Santal Parganas and the Feudatory States, and Orissa proper. The mean density gives little indication of its great variation, which is as high as 969 persons per sq. mile in the Muzaffarpur district of Bihar, with a density of 1,073 if calculated on cultivatable area, and as low as 43 in the Feudatory State of Rairakhol. In previous decades the number of emigrants has very greatly exceeded the number of immigrants. This excess has been considerably reduced during the past ten years.

Bihar and
Orissa.

Locality.	Area in sq. miles.	Popu- la- tion.	Den- sity.	Variation of the population per cent.					
				1881-91.	1891-01.	1901-11.	1911-21.	1921-31.	1881-1931.
Bihar and Orissa	111,702	42,329,583	379	+7·5	+1·8	+5·1	-1·2	+11·5	+26·8
Bihar ..	36,877	23,676,028	642	+4·7	-1·3	+1·5	-1·3	+9·7	+13·6
(excluding Santal Parganas).									
Orissa ..	8,201	4,202,461	512	+6·8	+7·1	+0·9	-4·6	+5·2	+15·8
(ex. Angul and Sambalpur)									
Chota Nagpur with Santal Parganas, Angul and Sam- balpur ..	37,976	9,799,087	258	+10·2	+5·2	+11·8	-0·1	+16·4	+50·6
Feudatory States	28,648	4,652,007	162	+25·6	+9·5	+19·0	+0·4	+17·5	+93·0

But these conditions have been confined to British territory, for in the States there has been in the past an excess of immigrants over emigrants which has been similarly reduced during the past decade. The public health has been exceptionally good throughout the decade, mortality from plague having decreased by about 73 per cent. and from cholera by about 30 per cent. At the same time, though the birth rate has fallen from 41 per mille to 36·5, the survival rate has more than doubled. Earners profited by a general decline in the cost of living, while cultivators also benefited during the greater part of the decade not only by a succession of good harvests but by the fact that the prices of food grains retained a high level after other prices had fallen. There have been heavy investments in post office 5-year cash certificates ; in the Post Office Savings Bank the number of depositors has risen since 1921 by 27·8 per cent. and the value of the deposits by 102 per cent. The standard of comfort has everywhere risen among the labouring classes, while an outstanding change in diet is the development of tea-drinking. It has already been pointed out that the population of this province is heterogeneous. That of Bihar is not markedly dissimilar to the population of the east of the United Provinces on the one hand or the west of Bengal on the other, between the populations of which it forms a natural link, and may be regarded as normal Hindustani speaking population of the Ganges valley. In Orissa proper the population is more nearly allied to that of Lower Bengal, but has a distinctive culture of its own. The Chota Nagpur Plateau and the Santal Parganas are primarily the habitat of comparatively primitive Munda speaking tribes and of others speaking Dravidian languages but closely allied to them in race. Sambalpur and Angul are not dissimilar and the inhabitants of the Feudatory States are also of the same kind, though Oriya replaces Hindi on the southern slopes of the plateau as the medium of communication with the more civilised world.

Bombay.

15. Bombay in 1921 included the area which in 1931 was enumerated as the Western India States Agency, and on this occasion therefore its area was reduced to 151,593 square miles (excluding Aden), having a population of 26,347,519 and a mean density of 174. Even with this reduction Bombay remains larger than any province except Burma and Madras. It comprises not only the British districts of the Bombay Presidency proper, but the Bombay States and Agencies and Sind. Aden is separately treated in an individual volume (Vol. VIII, pt. 3), and includes the whole of the Aden Settlement and Perim, but not the Aden Protectorate. An entirely separate volume (IX) deals with the cities of the Bombay Presidency, which is far ahead of any other province in India in the proportion of its urban to rural population, if we exclude Delhi and Ajmer-Merwara, where the principal unit of the province is itself a town.

Locality.	Area in miles.	Popu- la- tion.	Den- sity.	Variation of the population per cent.					
				1881-91.	1891-01.	1901-11.	1911-21.	1921-31.	1881-1931.
Bombay Province	151,673	26,398,997	174	+15·02	—3·6	+6·2	—1·2	+13·7	+32·0
Sind	46,378	3,887,070	84	+19·0	+11·7	+9·4	—6·7	+18·5	+60·8
Presidency ..	77,221	17,992,053	233	+13·7	—4·2	+5·3	—0·8	+12·4	+27·9
Bombay city ..	24	1,161,333	48,391	+6·3	—5·6	+26·2	+20·1	—1·2	+50·2
Bombay States ..	27,994	4,468,396	160	+17·6	—12·0	+7·0	+0·1	+15·5	+28·2
Aden	80	51,478	643	+26·4	—0·2	+5·0	+22·4	—8·9	+47·7

In Bombay City itself the population has actually fallen since 1921, partly probably because the economic depression which had set in by the census of 1931 had driven back to their homes the countrymen who normally come down to Bombay to work during the cold weather and partly no doubt owing to suburban expansion, but every other unit in the confines of the Presidency proper has increased in population during the decade and the general rate of increase, 13·7 per cent., is well above that of India as a whole. In the case of the cities the increase was probably greater than that actually shown, since the municipal authorities did not in all cases co-operate whole-heartedly, while some were definitely obstructive. In Surat, Kaira, Villeparle and Broach at any rate the enumeration was probably defective, and at Ahmadabad it was made impossible to carry it out at all in many parts of the city. For that town therefore an estimate has been made of the numbers not enumerated and added to the actual returns for the purposes of all tables in which details by religion, age, etc., are not required. Aden alone has fallen while the Bombay States and, even more, Sind have increased at a higher rate than the province as a whole, though Sind has been visited by disastrous floods and in 1929-30 revenue to the extent of Rs. 57,71,940 had to be remitted on account of damage by locusts. In marked contrast to all the decades since 1891 no district has suffered from a single very bad season during the whole period under review. Five seasons of the ten were good and five were moderate, and the fact that the prices of food grains fell more slowly than most others while cotton remained exceptionally high was of great benefit to the cultivator. At the same time wages and the demand for labour showed a tendency to rise rather than to fall until 1930, and then did not fall proportionately to the drop in prices. In the towns the decade was also one of prosperity until 1927-28, and in the earlier half of the decade urban labour seems to have reached an unprecedented standard of comfort, but at the end of the period the trade depression, aggravated by the civil disobedience movement, caused much unemployment and discomfort.

Burma.

16. The census of Burma was taken on February 24th two days earlier than that of India proper on account of local festivals which made the 26th an inconvenient date. Though only eighth in order of population figures, Burma is by far the largest of the provinces of the Indian Empire, having an area of 261,610 square miles, of which 233,492 were covered by the census operations of 1931. The

population censused is 14,667,146, having increased by 11 per cent. since 1921,

Locality.	Area in square miles.	Popula- tion.	Den- sity.	Variation of population per cent.				
				1891- 1901.	1901- 1911.	1911- 1921.	1921- 1931.	1891- 1931.
Burma ..	233,492	14,667,146	63	+35.9	+15.5	+9.1	+11.0	+89.9
Burman	156,297	12,856,207	82	+19.5	+14.6	+9.7	+11.7	+67.8
Chin ..	12,278	192,655	16	..	+38.9	-4.9	+20.6	+59.2*
Salween	7,101	111,947	16	..	+31.9	+3.5	-0.8	+35.5*
Shan ..	57,816	1,506,337	26	..	+18.7	+6.3	+5.1	+32.6*

* 1901-1931.

but these divisions are administrative and racial rather than geographical. Thus the Burman Division represents the plains districts of administered Burma in which the population is primarily (94 per cent.) Burmese, though it includes the remnants of the Mons of Pegu, the main bulk of the Karens, who appear also in the Salween and Shan divisions in smaller numbers, and a considerable share of the total number of Chins, Kachins and other indigenous races. It contains nearly all the Chinese other than Yunnanese, that is to say almost two-thirds of the total, and practically all the other foreign or Indo-Burmese population. The Chin division contains for practical purposes Chins and no one else. The Salween division, consisting as it does primarily of the Karenni, the only area in Burma with the status of an Indian State, has a population purely Karen and Tai. The Shan division, constituted by the Northern and Southern Shan States, is of course primarily Tai, but includes a good many Karens and Burmans, almost all the Yunnanese (who make up more than a third of the total Chinese in Burma), almost the whole of the Palaung-Wa branch of the Mon-Khmer race, many Kachins, about half the other indigenous races of Burma, and a few Indians. The immigration of Yunnanese during the decade has been considerable and has added about 10,000 to the population of the Northern Shan States, while Indians, largely Gurkhas from Nepal, have added another 11,000 to the Northern and 5,000 to the Southern Shan States. In the Salween division the population of the Karenni States decreased, and the increase in the rest of that division was largely due to the mines in Salween District. The Chin division has increased not only by the natural growth during a prosperous decade but by the inclusion of previously unadministered country on the Assam border. As far as climatic conditions went the decade was normal and floods and droughts were confined to small areas and involved no widespread calamities comparable with those which befell some parts of India, though the town of Pegu was destroyed by a disastrous earthquake which did damage elsewhere as well. Burma grows more rice than her population consumes, and although cultivable land is not readily capable of extension the area under irrigation was extended by some 317,000 acres during the decade. Industrial expansion, particularly in the production of oil, has been important in some districts and railways have extended by 434 miles. There has been some increase in mining activity in spite of the slump in silver and baser metals. The fall in the price of paddy was perhaps the

Year.	Price in rupees per 100 baskets (46 lbs.)
1921 ..	152
1922 ..	185
1923 ..	178
1924 ..	193
1925 ..	178
1926 ..	185
1927 ..	181
1928 ..	169
1929 ..	159
1930 ..	138
1931 ..	77

most serious feature of the decade economically. The marginal table shows the wholesale prices of paddy brought by boat to Rangoon annually from January to March. After a very considerable rise from the 1921 prices, the price fell in 1929 nearly to the 1921 level, in 1930 considerably below it and in 1931 dropped to half. The past decade witnessed a very rapid growth of national feeling in Burma. This feeling tended to take a racial bias and showed itself particularly strong against Indians and

Chinese, manifesting itself against the former in the Rangoon riots of May 1930, and against the latter in a riot in January 1931. With these came the rebellion, of which the Burma General Administrative Report for 1930-31 writes:—

“The outbreak of a sudden and prolonged rebellion came as a surprise. It began on 22nd December 1930 in Tharrawaddy (75 miles north of Rangoon), a turbulent district

* *Vide* Chapter I of Burma Census Report, 1931, paragraph 14.

since Burmese times and in these latter years a favourite resort of political agitators. Military Police were despatched in twenty-four hours, and regular troops followed, but by May 1931 there had been outbreaks in Prome, Yamethin, Pyapon, Henzada, Thayetmyo and attempted outbreaks elsewhere. The rebels were tattooed in order to render them invulnerable, and many wore simple uniform, for the rising was organised. Its object was the overthrow of Government and the enthronement of a jungle king, for in its prime origin it had little to do either with modern politics or with economic stress. It was aggravated by, just as in its turn it proceeded to aggravate, economic stress, but it originated in an outburst of mediæval superstition of a recurrent and recognisable type."

The outbreak coincided, of course, with the census, but luckily the preliminary enumeration could everywhere be completed in undisturbed conditions except in Tharrawaddy District and a small part of Pegu, where there was inevitably some under-enumeration. The rebellion spread to Henzada before the final enumeration, but the preliminary enumeration had already been completed.

Central
Provinces.

17. The Central Provinces and Berar, an area totalling 131,095 square miles, include not only the British districts, 82,153 sq. miles, and the fifteen States of the Central Provinces, 31,175 square miles, but the four districts of Berar, 17,767, which are leased in perpetuity from H. E. H. the Nizam. The total area of the province according to the latest revision is 133,050 sq. miles, but this figure was obtained too late for use in the tables. The total population is 17,990,937 with a mean density of 137 per sq. mile, but this density is very variable being exceedingly low in the 20,000 sq. miles still covered by forest. The highest density is that of the Katghora Tahsil which has 492 persons to the sq. mile, and the lowest that of the Ahiri Zamindari with only 16. Famines and epidemics have been res-

Locality.	Area in sq. miles.	Population.	Den- sity per sq. mile.	Variation of population per cent.					
				1881 to 1891.	1891 to 1901.	1901 to 1911.	1911 to 1921.	1921 to 1931.	1881 to 1931.
Central Provinces and Berar ..	131,095	17,990,937	137	+10.7	-7.0	+17.9	-0.3	+12.6	+35.0
British districts	82,153	12,055,885	147	+9.5	-9.2	+17.8	-0.2	+11.3	+30.2
Berar ..	17,767	3,441,838	194	+8.4	-5.0	+11.0	+0.6	+11.9	+28.8
Central Provin- ces States.	31,175	2,483,214	80	+23.4	-4.8	+29.8	-2.4	+20.1	+79.0

ponsible for
exceptional
fluctuations in
the past, and
the Central
Provinces
more than any
other are
marked by re-
curring alter-

nations between good and bad years. The decade under review opened in conditions of scarcity and high prices, while the effect of the influenza epidemic upon women of the child-bearing ages can be traced in certain age groups at the present census. Up to the end of 1921 public health was bad. Cholera, plague and malaria caused exceptional mortality. In 1922 however the satisfactory monsoons of that and the previous year reduced the death rate from 44 to 29, though the birth-rate also fell from 38 to 36 per 1,000. Good monsoons and healthy years continued until 1926-27, which was marked by serious floods, and 1927-28 saw the beginning of the decline in prosperity. Wheat was attacked by rust and more than half of the crop was lost in the northern districts of the province in that year and health deteriorated. The following year brought the recurrence of non-co-operation, agrarian agitation and general depression, another unsatisfactory agricultural year in the north of the province, and much unhealthiness from cholera, plague, small-pox, influenza and malaria. On the whole, however, the intervening prosperity more than balanced the depression at either end of the decade. The net area cropped increased from 23,585,215 acres to 25,364,376; the addition of a thousand miles of irrigation channels added nearly a hundred thousand acres of irrigated land; a thousand miles of metalled road were added to the existing metalled roads, and many new bridges, and 300 miles of railway. It is significant of the connection between prosperity and population that the growth of the latter was very small in the north of the province which suffered three very bad years at the end of the decade. Elsewhere, as in other provinces, the highest rate of increase was in the most thinly populated areas. The infant mortality rate appears to be higher in the Central Provinces than in India as a whole or in most other parts of India, but the rate of increase at this census has been 12.6% for the province. Both the natural features and the population are very varied. The Narbada valley in the north is a wheat growing tract; the Maratha plain in the west and the Chhattisgarh plain in the east

are rice-growing areas ; the Central plateau and the Chota Nagpur plateau in the north-east like the States of Bastar and Kanker and the district of Chanda in the south are largely forest. In the open country Marathi is the language of the west and Hindi of the east, but the forest tribes speak Dravidian or Munda languages. In Bastar State, the remotest part of the province, there has been much increase in communication, but the Administrator reports that the increase in traffic is leading to an increase in the consumption of opium and in the case of one tahsil to the substitution for opium of the much more pernicious mercury.

18. Coorg, smallest after Delhi of the provinces of India, is the only one which showed a decrease of population at the census of 1931. It is administered by a Chief Commissioner, who combines this office with that of Resident in Mysore, and has a council of 15 elected and 5 nominated members. Its area is 1,593 square miles (of which 519 are occupied by Reserved Forest) with a population of 163,327—511 less than in 1921, and a density of 103 persons per sq. mile. The decrease in population is probably greater than the figures indicate, since there has

Coorg.

Variation of the population per cent.									
Area in Sq. miles.	Population.	Density.							
			1881-91.	1891-01.	1901-11.	1911-21.	1921-31.	1881-1931.	
Coorg.	1,593	163,327	103	-2.9	+4.4	-3.1	-6.4	-0.3	-8.4

been a decrease of about 5,000 persons in the natural population most of which is balanced by an increase in immigrants more apparent than real, since it consists mostly of labourers who leave the province for their homes in March. In 1921 many must have already gone when the census was taken but in 1931 the census fell earlier before the exodus had started. The vital statistics showed an excess in deaths over births of 14,000, though it is stated of the average individual in Coorg that his desire "appears to be to have as many children as possible, irrespective of his economic position". Coffee plantations on an important scale as well as cardamom plantations on the western slopes of the plateau continued to flourish and tea to survive, though plantations of rubber and agave are being abandoned, but the staple crop is rice of which the province produces more than it consumes. Both for rice and coffee the decade was favourable except for the heavy floods in 1924. The fall in prices, steady till 1929, at the end of the decade caused paddy to be sold at exceedingly low rates and the area under rice-cultivation to decrease from 84,587 to 82,822 acres. Urban population has increased and a general increase in the number of occupied houses points to the gradual dissolution of the joint family system prevalent in Coorg.

19. Delhi is the smallest and most recently constituted of the provinces of India. It came into being as a province on the laying of the foundation stone of New Delhi by His Majesty the King Emperor in December 1911, and as a result of the establishment there of the imperial capital its growth has been phenomenal.

Delhi.

Locality.	Area in sq. miles.	Population.	Density.	Variation of population per cent.					
				1881 to 1901.	1901 to 1911.	1911 to 1921.	1921 to 1931.	1881 to 1931.	
DELHI PROVINCE	573.0	636,246	1,110	+6	+9	+2	+18	+30	+81
Urban	65.5	447,442	6,835	+11	+1	+12	+31	+47	+158
Old Delhi Municipality.	5.96	347,539	58,273	+11	+9	+11	+8	+40	+104
New Delhi	48.3	73,653	1,524	..	..	..	+95	..	..
Rural	507.5	188,804	372	+2	+9	-8	+2	+3	+6

It is of course primarily an urban unit and the total area of the province is only 573 sq. miles, but the population is 636,246 persons (722 females per 1,000 males) with a mean density of 1,110 persons per sq. mile. This density varies from 58,273 persons per sq. mile in Old Delhi municipality to 372 in the rural area, where the increase during the decade has been only 3 per cent. as compared with 30.3 per cent. for the province as a whole. This rapid increase is due to the abnormal growth of a newly established capital, and is very largely due to immigration, since the gross balance of migration in Delhi's favour is 189,594 persons, of which the Census Superintendent regards 111,775 as the actual net increase by migration during the decade since 1921. This growth in population has outstripped the rapid building of houses and in the urban area the density per 100 houses has increased from 410 in 1921 to 454 in 1931. The censused population of the urban areas

however (447,442) probably falls to about 330,000 in the hot weather, which is likely to be no more and possibly even less than its permanent population at the height of its importance in the reign of Shahjahan.

Madras.

20. Madras covering 142,277 sq. miles populated by 46,740,107 persons, is second among the major provinces in area, third in population and fifth in density (329), but in rate of increase seventh exceeding only Bengal and the United Provinces the higher population figure of which it is fast overhauling. Its rate of increase for the decade was 10·4 in British territory, a little less than the general rate of the whole Indian Empire. The total irrigated area has increased by some 66,000 acres, that is by 0·90 per cent. only, but important new works are projected. The decrease in the value of the crops raised has been nearly 46 per cent. which indicates not a fall in the quantity of the crop but in the level of prices. At the same time possibilities of agriculture on present methods have more or less reached a maximum and the Presidency can no longer feed itself. The decade was healthy, and not only has it been free from epidemics but the skilled research of Colonel Russell, the Director of Public Health, has made it possible to cope with epidemics when they arise, and in the case of cholera to predict their occurrence and so to forestall their virulence. Cholera, which is endemic in the south of the Presidency, has proved to have a six-year cycle. The vital statistics of Madras are worthy of reference since this province is the only one whose registration of birth and death approaches anything like a satisfactory standard. Even so in 1930 some 62,000 unregistered births and 20,000 unregistered deaths were detected by inspecting officers in the Presidency. In some parts of Madras emigration takes place on a larger scale to Assam, Burma, Ceylon and Malaya, the annual loss being some 13,000, and though the decline in the planting industry has resulted in large numbers of returns, these had not had their full effect by the time the census took place, even from Burma. As in the accuracy of her vital statistics, Madras is ahead of other provinces in the matter of birth control. A tendency is observed by the Census Superintendent for men at any rate to marry later, and contraceptive methods are advocated by influential persons and widely advertised in the press. The Census Superintendent writes "Ten years should show a marked growth in their popularity. Books on the subject are to be found in any bookstall or publisher's list and whether they are read as mild pornography or for serious guidance it is unlikely that they can fail to exert some influence". He adds, as a portent, that contraception of a crude kind has been observed among the Goundans of Salem to prevent large families, the fragmentation of holdings and the weakening of the joint family system.

The external boundaries have not altered. Internally there have been some changes between districts the most important of which has been the re-absorption in the three neighbouring plains districts of the Agency Division, a hilly tract inhabited by Khonds, Sawaras, and similar hill tribes and quite alien to the plains

Province and Natural Divisions.	Area in sq. miles.	Population.	Density.	Variation of the population per cent.				
				1891-01.	1901-11.	1911-21.	1921-31.	1891-1931.
Madras	142,277	46,740,107	329	+7·2	+8·3	+2·2	+10·4	+31·1
Agency	19,869	1,763,765	89	+2·4	+16·7	-4·0	+16·5	+33·6
East Coast North ..	31,532	12,175,530	386	+8·8	+9·8	+3·2	+12·2	+38·5
East Coast Central ..	32,020	13,349,980	417	+8·9	+7·9	+3·0	+11·3	+34·7
East Coast South* ..	22,102	10,380,774	470	+5·6	+8·4	+3·0	+5·2	+24·0
West Coast	10,798	5,082,281	471	+6·3	+7·1	+3·3	+13·5	+33·5
Deccan*	25,954	3,094,543	154	+5·5	+3·5	-3·7	+10·3	+16·0

* Excluding States.

districts which have absorbed it. The mean density is 329 but density varies greatly in different areas being only 89 persons to the square mile in the agency tracts and 471 on the west coast, though one district, the plains of Godavari East, on the Coromandel Coast reaches a higher density (660) than Malabar itself with 610. There is a greater tendency to city life in Madras than in any major province but Bombay, but the towns are far less industrial in character than that of the latter province. Nevertheless signs of industrial development are appearing and cotton mills are springing up at small country centres supplied by the cotton growing areas they adjoin. Thus Pollachi, a small town in Coimbatore district, had six mills in 1921 but thirty in 1931. Cheap power from water is a possibility and the use of electricity is steadily advancing in popularity, as the

decade has seen many towns with oil lamps or no lamps adopt electric lighting and fans. The standard of living is rising and in ten years the villager has "become accustomed to and takes as necessities what formerly were rather unlooked-for luxuries. The great advance in communications which the motor bus and car has brought has contributed enormously to widening horizons".

21. The North-West Frontier Province has an area of 36,356 square miles with a population of 4,684,364 and a mean density of 129 per square mile, but of this area 22,838 square miles constitute the Trans-frontier Agencies, of the population of which 2,212,837 is only estimated and not obtained by enumeration, making a total with those enumerated in trans-frontier posts of 2,259,288 (density 99) and leaving 2,425,076 persons in the five regularly administered districts with an area of 13,518 square miles and a mean density of 179, an area a little greater than that of Holland with a population a little less than that of Denmark. Since 1921 the Malandri tract, 20 square miles, has been added to the administered from the unadministered area and 4 square miles have been transferred from Kohat District to the former. Otherwise

North-West
Frontier
Province.

Locality.	Area in sq. miles.	Popula- tion.	Density.	Variation of population per cent.					
				1881 to 1891.	1891 to 1901.	1901 to 1911.	1911 to 1921.	1921 to 1931.	1901 to 1931.
N. W. F. P.	36,356	4,684,364	129	..	..	+79.7	+82.9	-7.7	+120.4
Administered areas.	13,518	2,425,076	179	+17.9	+9.9	+7.6	+2.5	+7.7	+18.8
Agencies and Tribal areas	22,838	2,259,288	99	..	..	+1,831.9	+74.2	-20.0	+2,590.8

there has been no territorial change. The density of population in the administered areas exclusive of urban population varies according to the combined factor of rainfall \times irrigable land, decreasing from

north to south. The growth of population has depended mainly on the extension of canal irrigation. The Kabul River Canal reached its maximum area of irrigation in 1921 and the Upper Swat Canal in 1929. When the decade opened the agricultural position was bad and the frontier was disturbed, a condition which, however, benefits the inhabitants of the administered districts financially. Both contractors and unskilled labour do well and "to the Pathan of fighting age times of unrest call up memories of a princely pay earned in princely idleness, guarding with a government rifle and the prestige of his race some lonely spot on a winding frontier road". The situation on the frontier improved rapidly, but this improvement was followed by outbreaks of internal disturbance in 1924 and 1927 of a communal nature and in 1929 by revolutionary outbreaks all over the province culminating in the very serious riots of April 1930 in Peshawar with inevitable repercussions among the border tribes, though the situation was restored in time for the census to be taken generally under normal conditions. Agriculturally the decade was satisfactory until 1924, less satisfactory from 1924 to 1928 but improved from 1928 to 1930 when a deficient fall of rain and an excessive fall in prices combined to reduce greatly the area sown for crops. Rs. 22,06,956 of revenue were remitted on account of damage by locusts in the years 1929-30. Public health was bad in the first half of the decade, which the Census Superintendent attributes to the after effects of the influenza epidemic, but the second half was one of "uninterrupted good health" which "restored to the people their normal vitality", and the increase of population in the administered districts since 1921 has been 7.7%. The Co-operative Credit movement was started in 1925, and in 1926 there were 16 societies with a membership of 365 and a working capital of Rs. 39,317. In 1930 there were 166 societies with 5,825 members and a working capital of Rs. 8,92,000. The primary necessity of the province is a settled economic outlook without which an increase in population disproportionate to that in wealth and productive efficiency will involve poverty and discontent and in all probability a destructive agitation and very serious disturbance.

22. The Punjab is the eighth province in India in area, but with the Punjab States Agency fourth in area, sixth in density and fifth in population. It has an area of 136,964 square miles with a mean density of 208, but this includes not only British districts and the Punjab States but also the Punjab States Agency, a separate unit though treated in the same volume. Taken separately British territory has a population of 23,580,852 with a density of 238 over 99,265 square miles. The area appears in the tables as 99,200 the revised figure having been received too late for

Punjab.

incorporation, a condition which also explains the appearance of the area 5,820 in Table I as that of the Punjab States instead of the revised area 5,292 square miles with a population of 437,787 and a density of 83. The Punjab States Agency has an area of 32,407 square miles, a population of 4,472,218 and a mean density of 138. The increase in the Punjab population during the last 40 years is well illustrated by the density of Lyallpur district which was 15 per square mile in 1891 and is now 368. The last decade has seen the highest rate of increase yet recorded.

Locality.	Area in sq. miles.	Population.	Density.	Variation in population per cent.					
				1881 to 1891.	1891 to 1901.	1901 to 1911.	1911 to 1921.	1921 to 1931.	1881 to 1931.
Punjab ..	136,984	23,490,857	208	+10.2	+6.8	-2.4	+5.5	+13.5	+37.0
British Punjab ..	99,265	23,580,852	238	+10.1	+0.9	-1.8	+5.7	+14.0	+39.2
Punjab States ..	5,292	437,787	83	+8.9	+4.9	+0.1	-1.0	+7.3	+21.5
Punjab States Agency	32,407	4,472,218	138	+10.6	+3.7	-5.3	+5.5	+11.6	+27.7

It has been a healthy decade, the first half in particular, though in the second half there were plague epidemics in 1924

and 1926, while in 1926 and 1928 there were localized epidemics of cholera. The birth rate, twice that of the United Kingdom, has remained consistently high. Agriculturally the decade has been prosperous. The Sutlej canal system in 1921 fed the Sirhind Canal only; it now irrigates large tracts in Multan, Lahore, Ferozepore and Montgomery districts and in Bahawalpur State, as well as in Bikaner in Rajputana. In the Punjab as a whole canal irrigation has extended by over 19 per cent. and has added 2,000,000 acres of irrigated land during the decade, though a drawback to irrigation has appeared in the tendency towards the rise of the subsoil water level, which forces up from below salts which make the surface soil unfit for cultivation. Agricultural wages remained high until 1928 and have not fallen so rapidly as prices. Agricultural credit has increased its capital from 216.13 lakhs in 1921 to 817.91 in 1931 and its owned capital from 113 to 317 lakhs, and an indication of agricultural prosperity is to be found in the rise by 22 per cent. in the price of agricultural land. There has been a spread of improved varieties of wheat, cotton and sugar-cane and a great advance in the local manufacture of cane mills, ploughs, irrigation wheels and other agricultural implements. In 1921 the Census Superintendent remarked on the noticeable absence of any local manufacture of agricultural implements, but now at Batala, in Gurdaspur, alone there are 21 iron-foundries with an annual output of over 19,000 implements valued at Rs. 537,000. The comparative prosperity and high prices of the earlier part of the decade led to increased interest and activity in the formation of joint stock companies, and factories increased from 297 with 42,428 hands to 526 with 49,549 hands. The extraction of petroleum and the manufacture of cement from limestone have been started in Attock district within the decade, while the Mandi hydro-electric scheme now just completed is likely to hasten the industrialization of the province by the plentiful supply of cheap power. It remains to mention the rural uplift movement started in Gurgaon district in 1931 by Mr. Brayne and taken up elsewhere by the Y. M. C. A. which has also opened in Lahore a broadcasting station which already transmits to 1,500 receivers.

United
Provinces
of Agra
and Oudh.

23. The United Provinces have an area of 112,191 sq. miles of which 5,943 constitute the States of Rampur, Tehri-Garhwal and Benares. The total area is less than that of 1921 by 53 sq. miles on account of 8 sq. miles transferred elsewhere and 45 reduced by fresh surveys. The province (British territory) is a little smaller than the British Isles and has a slightly larger population, while the total population of the province is 49,614,833 with a mean density of 442. Though seventh of the provinces of India in size, it is third in point of population. Eighty per cent.

Locality.	Area in sq. miles.	Population.	Density.	Variation of population per cent.					
				1881-1891.	1891-1901.	1901-1911.	1911-1921.	1921-1931.	1881-1931.
United Provinces ..	112,191	49,614,833	442	+6.3	+1.7	-1.0	-3.1	+6.7	+10.6
British Territory ..	106,248	48,408,763	456	+6.2	+1.7	-1.1	-3.1	+6.7	+10.6
Agra ..	82,094	35,613,784	434	+4.5	+1.9	-0.7	-3.0	+7.2	+10.0
Oudh ..	24,154	12,794,979	530	+11.1	+1.4	-2.1	-3.1	+5.2	+12.4
U. P. States ..	5,943	1,206,070	203	+7.3	-1.4	+2.3	-4.6	+6.3	+9.7

of the earning inhabitants are actively engaged in agriculture. The decade has been a good one in respect of rainfall and crops, in spite of having opened with famine conditions in Gonda and Bahraich, and closing with drought and locusts in certain restricted areas, and with a serious collapse of agricultural prices. The Sarda irrigation canal, on which work was started in 1921, was opened in the main branch, in 1928. The system comprises some 4,000 miles of main channel and distributaries and 1,700 miles of drains over an area of six million acres of which it is anticipated that on an average 1,350,000 will be irrigated annually by its means. New masonry wells to the number of 150,314 have been constructed during the decade, mostly at the expense of the cultivators themselves, but the net cultivated area of the province has not increased and the double-cropped area is also stationary. The principal food crops are rice, millet, wheat, barley and pulse. Sugarcane is very important in the north-west and oilseeds are cultivated often in lines sown through fields of other crops. The condition of livestock during the greater part of the decade was unsatisfactory on account of epidemics. The enquiries made by the Banking Enquiry Committee in 1929 indicated that 46% of tenants and peasant proprietors were then debt-free, and 22% owed less than two years' rent. Of landlords a larger number were in debt and their debts were very much greater. The fragmentation of holdings is a serious disadvantage to the agriculturist, and the reserves built up during the first seven prosperous years of the decade have been exhausted by the collapse at its close. In 1929-31 revenue was remitted to the amount of Rs. 1,68,50,000, and about three times that amount in rents. In industry, of which Cawnpore is the principal centre, the numbers of factories rose by 72·5% from 218 to 376 and of persons employed in them by 33·2% from 69,000 to 92,000, and the increase has been principally in permanent as distinct from seasonal employment. There has been a marked improvement in public health, particularly in the matter of deaths from plague, cholera and small-pox. The increase in population during the decade has been greater in the States than in British territory but amounts over the whole province to 6·7%, the density being greater in the east than in the west. In this connection it is pointed out that the higher castes are predominant in the west of the province, and the lower in the east, or in cases of castes uniformly distributed, the western branches are socially superior. Generally speaking, however, the population of the United Provinces, like its language, is more uniform than that of most provinces in India.

24. Baroda State occupies 8,164 sq. miles in Gujarat and Kathiawar, but is not a compact whole, consisting, as it does, of four major and several minor disconnected areas, with a total population of 2,443,007 and a mean density of 299 per sq. mile. The population has increased by 14·9% since 1921. The natural increase is estimated at 9·4%, and the increase due to immigration was swollen by 26,755 persons who migrated from villages in adjoining British territory for political motives

Baroda.

Locality.	Area in sq. miles.	Population.	Density.	Variation of population per cent.							
				1881-1891.	1891-1901.	1901-1911.	1911-1921.	1921-1931.	1881-1931.		
Baroda State	8,164	2,443,007	299	+10·7	-19·2	+4·1	+4·6	+14·9	+12·0

connected with the Non-co-operation movement. About the size of Württemberg both in area and in population, Baroda is the sixth largest of the Indian States though about sixteenth in area. No epidemics visited the State during the decade, nor were there any calamities claiming a serious toll of lives, but the State suffered severely from floods, frost, locusts and poor seasons and at the end of the decade from the heavy fall in prices. Nevertheless co-operative societies rose in number from 509 in 1921 to 1,047 in 1931, their membership from 16,932 to 37,321 and their capital from 26 to 75 lakhs of rupees. Occupied area increased from 3,780,000 acres to 3,920,000 and the number of permanent irrigation wells increased from 60,433 to 63,775. Medical relief continued to be expanded and child welfare and anti-malarial measures to occupy the State Sanitation Department.

The Central
India
Agency.

25. The Central India Agency deals with 61 Indian States situated roughly between Rajputana and the Central Provinces and occupying an area of 51,597 sq. miles including the British pargana of Manpur (54 sq. miles) and about 10 sq. miles of States territory under British administration. To them has been added for census purposes Khaniadhana State which is dealt with by the Gwalior Agency and has an area of 68 sq. miles. The total population dealt with is 6,615,120 in the Agency and 17,670 in Khaniadhana with a mean density of 129 per sq. mile. As a result of exchanges of territory with Rajputana and Gwalior there has been a net increase since 1921 of 66 sq. miles. The Agency is not a compact area but consists of "dissimilar tracts with different physical and geographical environment and complex ethnically, culturally and linguistically. Broadly speaking three areas may be recognised. They are Malwa, Bundelkhand and Baghelkhand". The States with which the Agency deals are described as "bewildering in variety as regards their area, population, income, degree of internal autonomy and their relationship with the paramount power". Some half dozen or more of these States are compact areas, but the great majority constitute "a medley of interlaced territories and the Agency itself is a mosaic of fragmented sovereignties". Malwa with its undulating plains and black soil and the fertile Narbada valley, although associated with the inhospitable Vindhya and Satpura hills, contrasts very markedly with the hilly, sandy and stony country of Bundelkhand and Baghelkhand. The west, that is the former, grows cotton, wheat and *jowar*, the latter, the eastern parts, grow rice and *kodon*. The former is a favoured region generally free from seasonal calamities, and the latter though with a higher average rainfall is more subject to drought and scarcity. The decade economically has been

Locality.	Area in sq. miles.	Popula- tion.	Den- sity.	Variation of population per cent.					
				1881-91.	1891- 1901.	1901-11.	1911-21.	1921-31.	1881-1931.
Central India Agency ..	51,597	6,632,790	129	..	..	+12.9	-2.1	+10.5	+22.0*
(with Khaniadhana State).									
Manpur Pargana ..	49	6,852	140	..	-8.5	+35.2	-30.9	+50.0	+28.3†
Ali-Rajpur ..	836	101,963	122	+23.3	-28.4	-44.4	+23.3	+14.0	+79.4
Barwani ..	1,178	141,110	120	+42.2	-5.1	+42.6	+10.7	+17.4	+150.0
Bhopal ..	6,902	729,955	106	-0.2	-29.5	+8.7	-6.2	+5.4	-24.4
Dewas, I ..	449	83,321	186	+11.4	-22.4	+18.5	+16.6	+8.2	+12.7
Dewas, II ..	419	70,513	168	+2.1	-20.1	+14.3	+5.3	+5.2	+3.4
Dhar ..	1,784	243,430	136	..	..	+12.0	+19.2	+5.9	+42.0*
Indore ..	9,618	1,318,237	138	+4.8	-20.8	+16.3	+9.4	+14.5	+21.0
Jhabua ..	1,336	145,522	109	+28.9	-32.3	+37.2	+11.4	+17.4	+56.6
Jaora ..	602	100,166	166	..	..	-1.4	+3.9	+16.7	+19.7*
Khilchipur ..	273	45,583	167	+0.5	-14.2	+28.7	-0.1	+13.8	+26.2
Narsinghgarh ..	734	113,873	155	+3.4	-20.8	+19.3	-7.7	+12.3	+1.3
Rajgarh ..	962	134,891	140	..	..	+34.1	-9.7	+17.6	+42.4*
Ratlam ..	693	107,321	155	+2.1	-4.8	-2.9	+3.6	+25.5	+22.9
Sailana ..	279	35,223	126	+6.0	-18.0	+10.7	-5.0	+29.7	+18.5
Sitamau ..	202	28,422	141	+8.0	-28.4	+11.0	+0.2	+7.0	-7.8
Other Malwa States ..	526	80,467	153	..	..	+31.1	+8.4	+10.9	+57.7*
Ajaigarh ..	802	85,895	107	+14.2	-15.9	+11.3	-2.6	+1.3	+5.5
Baoni ..	121	19,132	158	+8.1	+7.3	+1.7	-1.9	-3.1	+12.2
Bijawar ..	973	115,852	119	+8.9	-10.5	+13.3	-10.8	+3.7	+2.3
Charbhari ..	880	120,351	137	+0.1	-13.4	+6.9	-6.9	-2.5	-15.8
Chhatarpur ..	1,130	161,267	143	+7.5	-9.4	+5.4	-7.4	-3.2	-7.9
Datia ..	912	158,834	174	+2.1	-6.7	-11.1	-3.8	+6.8	-13.0
Orchha ..	2,080	314,661	151	+6.9	-3.4	+2.6	-13.7	+10.4	+1.0
Panna ..	2,596	212,130	82	+5.3	-19.4	+18.6	-13.7	+7.4	-6.7
Samthar ..	180	33,307	185	-4.9	-17.4	-4.7	+4.1	+0.3	-13.8
Other Bundelkhand States ..	407	67,586	166	+1.3	-11.0	+4.3	-2.0	-0.4	-8.1
Baraundha ..	218	16,071	74	+7.6	-15.4	+8.0	-6.3	+1.0	-7.0
Maihar ..	407	68,991	170	+8.1	-17.6	+14.5	-9.0	+3.7	-3.8
Nagod ..	501	74,589	149	+5.6	-25.3	+18.8	-8.6	+9.4	-6.3
Rewa ..	13,000	1,587,445	122	+15.6	-12.0	+14.2	-7.5	+13.3	+21.6
Other Baghelkhand States ..	580	92,160	159	+15.0	-14.5	+9.8	-6.6	+6.6	+7.4
Khaniadhana ..	68	17,670	260	+10.2	+4.4	+13.2	-5.0	+5.8	+30.9

* 1901-1931.

† 1891-1931.

one of comparative prosperity, free from famine or serious scarcity in any large area and from any widespread epidemic. Malwa was short of rain in 1925 and 1929, Bundelkhand and Baghelkhand in 1928 and 1929. The increase in population for the whole agency since 1921 has been 10.5%, ninety-two per cent. of which increase is natural, only eight per cent. of it being due to the favourable balance of migration.

Gwalior.

26. Gwalior State, the dominion of the Scindia family, about the size of the Irish Free State, is the sixth largest of the Indian States in area and

fifth in population, having 3,523,070 inhabitants in an area of 26,367 sq. miles, a density of 134. Thirty-two square miles of area, the status of which is in dispute, have been excluded at this census and 16 square miles not before included have been added, but the total thus arrived at is probably not quite accurate and the latest survey estimate of the area of Gwalior State is 395 sq. miles less than the area here quoted, but the figure has not yet been verified by the State. The increase in population since 1921 has been 10·3% in spite of an adverse migration balance of about —15,000. The State is not a compact area but consists of one large block of contiguous parganas and a number of smaller outlying ones. The

Area in sq. miles.	Popula- tion.	Density per square mile.	Variation of population per cent.						Census Com- missioner for the State com- pares the population of India in general and
			1881-91.	1891- 1901.	1901-11.	1911-21.	1921-31.	1881- 1931.	
Gwalior State	26,367	3,523,070	134	+13·9	—12·7	+5·3	—1·3	+10·3	+14·0

Gwalior in particular to Penelope's web, alternately woven and unpicked; he regards the fluctuation at alternate decades as symptomatic of the normal growth of the population. He concludes that the comparative freedom of the decade from scarcity and epidemics has kept the mortality rate down to normal and that the population which survived the influenza epidemic of the previous decade had a superior biological equipment and a higher survival rate which have been responsible for the exceptional increase experienced.

27. His Exalted Highness the Nizam's Dominions, though a little less than Jammu and Kashmir in size, constitute by far the largest of the States in population, containing 14,436,148 persons with a mean density of 175 in an area of 82,698 sq. miles. North of the Godavari and its principal tributary the Manjra the country is rich and highly cultivated, principally in cotton and wheat, while in the south and east the country is more rugged and less fertile, the most valuable crop, at any rate in the east, being rice. The decade was on the whole a good one agriculturally. It opened, it is true, with famine but except for that first year the harvests were either good or moderate and the land under cultivation increased from 38 to 42 million acres. Co-operative Societies increased from 1,437 to 2,157 and their membership from 35,293 to 53,120 and their working capital from eighty-six and a half lakhs to nearly two crores of rupees. Cotton prices fell in 1926, but otherwise the agriculturist benefited by well maintained prices for most of his produce until 1930. The results are seen in the increase in natural population by 14·9%, though part of this may have been due to improved enumeration. In the last

Hyderabad.

Locality.		Area in sq. miles.	Popula- tion.	Den- sity.	Variation of population per cent.					
					1881-91.	1891- 1901.	1901-11.	1911-21.	1921-31.	1881-1931.
Hyderabad State	..	82,698	14,436,148	175	+17·2	—3·4	+20·0	—6·8	+15·8	+46·6
Marathwara ..	..	41,196	6,881,550	167	+17·0	—10·1	+16·6	—9·0	+14·5	+28·0
Telingana ..	..	41,502	7,554,598	182	+17·4	+4·6	+23·6	—4·6	+16·9	+69·4

50 years the population of the Marathwara division, the western part of the State, has increased by 28·0% while that of the Telingana, the eastern part, has increased by 69·4%. The north-western part of the State is Maratha by language and population, the south-western is Kanarese and these two areas compose the *Marathwara*; the eastern part of the State (*Telingana*) is Telugu by language and population; both are predominantly Hindu by religion.

28. Jammu and Kashmir State is in area the largest of the Indian States but only stands fourth in order of population. Much of the State's surface is occupied by arid desert at a very high elevation unable to sustain any but the scantiest population, and though the fertile valleys of the irrigable country support a high density of population they are too limited in comparison to balance the uninhabitable mountains. The total area is 84,516 sq. miles with a population of

Jammu and
Kashmir.

3,646,243, giving a mean density of 43 per sq. mile. This density drops to 5 persons per sq. mile over three quarters of the State in the area of the the semi-Tibetan tracts

Locality.	Area in sq. miles.	Popula- tion.	Density.	Variation of population per cent.				
				1891 to 1901.	1901 to 1911.	1911 to 1921.	1921 to 1931.	1891 to 1931.
Jammu and Kashmir ..	84,516	3,646,243	43	+14.21	+8.7	+5.1	+9.8	+43.3
Jammu ..	12,401	1,788,441	144	+5.7	+5.4	+2.7	+9.0	+24.7
Kashmir ..	8,555	1,569,218	183	+21.9	+11.9	+8.6	+11.5	+65.3
Frontier Districts ..	63,560	288,584	5	+10.2	+14.2	+3.1	+5.6	+80.1

which include the vast deserts of Ladakh at a height of some 16,000 or 17,000 feet above sea level, and the stupendous peaks of the Pamirs and of the Hindu Kush and Karakoram ranges. On the other hand the density for the Jammu and Kashmir provinces by themselves works out at 160.2 persons per sq. mile, while throughout the State most districts carry over 1,000 to the sq. mile of cultivated area, and actually in Ladakh and Gilgit, in the inhospitable mountains, that is, 1,600 is found, the highest density of inhabitants to cultivated land except in the Srinagar District itself. During the decade 136 miles of additional canal have been constructed irrigating an additional area of some 47,000 acres, and great improvements have taken place in road communications. Co-operative societies have increased by about 1,900 and their members by 300 per cent. since 1923, and their working capital amounts to over 97 lakhs. Except for disastrous floods in 1928, the decade has been very prosperous agriculturally, and the volume of both exports and imports has increased by about 25 per cent., though the money value of the exports fell during the last three years of the decade to something below the 1921 value of exports only four-fifths of their present volume. The decennium was also exceptionally healthy. The increase in population over the State as a whole has been 9.8 per cent., increasing the density per sq. mile from 39 to 43. The population is predominantly Muslim, though Ladakh is inhabited by Tibetan Buddhists who keep down the population to a level which their barren mountains can support by a system of polyandry. The other inhabitants of the frontier districts are Muslim including the mongoloid Baltis and the Dards of Gilgit.

Madras
States
Agency.

29. The Madras States Agency includes five States in the south of India two of which, Cochin and Travancore, in the south-west corner, publish their own

State, etc.	Area in sq. miles.	Popula- tion.	Density.	Variation of population per cent.					
				1881 to 1891.	1891 to 1901.	1901 to 1911.	1911 to 1921.	1921 to 1931.	1881 to 1931.
Madras State Agency ..	10,698	6,754,484	631	+10.6	+13.2	+14.9	+13.5	+23.7	+101.9
Cochin State ..	1,480	1,205,016	814	+20.4	+12.3	+13.1	+6.6	+23.1	+100.7
Travancore ..	7,625	5,095,973	668	+6.5	+15.4	+16.2	+16.8	+27.2	+112.2
Other States ..	1,593	453,495	285	+22.3	+0.93	+9.6	+2.2	-4.6	+32.1

census reports in the India series. The other three, Pudukkottai, Banganapalle and Sandur, are dealt with in the Madras provincial report to which reference must be made for detailed treatment. Figures of the area and population of Pudukkottai, the largest of them, will be found in the supplements to Tables I and II in part (ii), and a separate report has been published by the State, a summary of which forms Appendix VI of Volume XIV (Madras) of this series.

Cochin has an area of 1,480 square miles and a population of 1,205,016 persons, (females exceeding males) showing, over that recorded in 1921, an increase of 23.1 per cent., which the Census Superintendent regards as representing a real increase of 19 per cent. The density is 814 to the square mile, but this is over the whole State, whereas more than a third is mountainous and the area includes the surface of the back waters, long stretches of salt water lagoon cut off from the sea by narrow tongues of land. In the mountainous forests of the Western Ghats the density is very low, as the inhabitants consist only of a few scattered jungle tribes and the forest officials, and if these areas be excluded from the forest taluks, the

density of which is 365 to 975 when they are included, the density rises to 1,126, while the density of the coastal taluks excluding the lagoons in a similar manner becomes 2,733, one village, covering an area of 3·8 sq. miles, having the incredible density of 4,090 persons to the sq. mile, for its inhabitants are not an urban population but a rural and agricultural one, the staple crops being coconut and rice, as in the case with most of the taluks of Cochin State.

Travancore is a much larger state than Cochin but otherwise closely resembles it in population and in physical features, though it has a drier strip of coast towards the south running down to Cape Comorin. Its area is 7,625 sq. miles and its population is 5,095,973 with a mean density of 668. Though third in order of population, at least sixteen States in India are larger in size. It falls into three clearly marked natural divisions, the coast, the low hills and the high forest-clad hills. The rainfall varies from 35 inches in the extreme south to nearly 300 in the high hills, but over by far the greater area of the State it varies, as in Cochin, from 100 to 180. The hills have been largely developed and planted with tea and cardamom plantations, but are still thinly inhabited compared to the plains. Except Cochin, Travancore is far more densely populated than any State in India, and is more densely populated than Bengal. In the low hills tapioca is cultivated as a staple food. The net area under cultivation increased by 9·5 per cent. only as compared to an increase of 27·2 per cent. in population between 1921 and 1931, but the food production of the State is inadequate to its needs and Burma rice is purchased with the proceeds of the sale of coconut products, pepper and cardamoms. Wages nearly doubled during the decade and Savings Bank deposits more than doubled. This prosperous position was however being very severely affected by the economic depression in 1931.

30. Mysore State, the centre and main area of the Kanarese speaking population of south India, after Hyderabad the most populous of all the States, and the largest in area after that State and Jammu and Kashmir, has an area of 29,326 square miles, and a population of 6,557,302, with a mean density of 224 persons per square mile. The increase of population since 1921 has been 9·7 per cent., though the increase of natural population alone has been 10·8. This increase has not been evenly distributed, as the State is divided into the Malnad, that is the area of the high hills in the west, where the density falls in one taluk to 66 and where the population is little more than constant, and the Maidan, which is the comparatively level land constituting the plateau which is the main bulk of the State, and in which the increase and density is greater than that of the State as a whole. The highest rural density reached is 457 per square mile in the Narsipur taluk. The State includes the large Civil and Military station of Bangalore which is under British administration. The area under cultivation has increased during

Mysore.

Locality.	Area in sq. miles.	Popula- tion.	Density.	Variation of population per cent.					
				1881- '91.	1891- 1901.	1901- '11.	1911- '21.	1921- '31.	1881- 1931.
Mysore State	29,326	6,557,302	224	+18·1	+12·1	+4·8	+3·0	+9·7	+56·6
Civil and Military Station, Bangalore.	14	134,113	9,934	+7·0	-10·5	+12·5	+18·0	+12·8	+43·4
Remainder of State ..	29,312	6,423,189	219	+18·3	+12·5	+4·7	+2·7	+9·6	+56·9

the decade by 11·5% while a number of important works has increased the area under irrigation by 25% since 1921. Various improvements in agriculture and cattle breeding are taking place, and the cinema is used for instruction. A Land Mortgage Bank has been established and an Agriculturists' Debt Relief Regulation has been passed by the Legislature. The number of cooperative societies has increased by 713 and their membership by 45,000, making a total membership of 137,615, and the deposits in the Government Savings Bank amounted in 1931 to nearly Rs. 17,000,000, having more than doubled during the decade. Public health was good on the whole throughout the decade, and though prices fell towards its close harvests were good and the cultivator did not suffer severely. The State is importing more cereals for food than it exports, the imports being more than half in husked rice, but it is estimated that some 500,000 more acres can still be brought under irrigation. Rice and *ragi* are the staple crops. Industries are being developed, but it is doubtful if they can be so developed as to keep pace with the needs of the population in periods of normal

increase, and the Census Superintendent for the State points out that tabus such as that on marital connection during lactation, or at any rate soon after confinement, which tend to keep down the birth rate, are no longer observed as they used to be, while children are suckled only five or six months instead of until able to consume ordinary food. Meanwhile the Mysore Government has instituted a Birth Control Clinic in the Maternity hospital at Bangalore.

Rajputana.

31. The Rajputana Agency comprises 19 States, 1 Chiefship and 1 Estate grouped together for the purpose of their political relations with the Government of India, which are conducted through the Agent to the Governor-General in Rajputana. It includes also a small area of 6 square miles which is leased from the Sirohi State and is therefore at present under British administration forming the Abu district. The total area of the Agency is 129,059 square miles with a total population of 11,225,712 and a mean density of 87 persons per square mile. That is to say, it is about the same size as Norway with 4 times the population, or considerably larger than the United Kingdom but with one quarter of its population. Density varies very greatly, being 5 only in Jaisalmer and 246 per square mile in Bharatpur State. In the dry western part of the Agency the rainfall is little over 10 inches, whereas in the eastern part it is three times as much. The conditions of the decade have been good and the population has increased by 14·2% since 1921 though this represents an increase of little more than one million on the 1881 figure and the 1931 total is actually less than that returned in 1891, though in that census a considerable number of Bhils were estimated instead of enumerated as in all cases on this occasion. The biggest increase is that of 41·9% in Bikaner State, mostly on account of irrigation and immigration. Bharatpur (—1·9%) is the only State which

State or Agency.	Area in sq. miles.	Popu- lation.	Den- sity.	Variation of the population per cent.					
				1881-91.	1901-01.	1901-11.	1911-21.	1921-31.	1881-31.
Rajputana ..	129,059	11,225,712	87	+20·6	—20·5	+6·0	—6·5	+14·2	+9·3
Abu District ..	6	4,532	755	..	+32·2	+5·5	—16·0	+25·7	+47·3*
Alwar ..	3,158	749,751	237	+12·4	+7·0	—4·4	—11·4	+6·0	+9·8
Banswara ..	1,606	225,106	140	+39·2	—17·3	+11·0	+15·0	+18·3	+48·1
Bharatpur ..	1,978	486,054	246	—0·8	—2·1	—10·8	—11·2	—1·0	—24·6
Bikaner ..	23,317	936,218	40	+63·4	—29·7	+19·0	—5·0	+41·0	+83·9
Bundi ..	2,220	216,722	98	+16·1	—42·1	+27·7	—14·5	+15·0	—14·0
Dholpur ..	1,221	254,986	200	+12·1	—3·0	—2·0	—12·7	+10·8	+2·1
Dungarpur ..	1,447	227,544	157	+7·8	—39·5	+59·0	+16·9	+20·2	+48·4
Jaipur ..	15,570	2,631,775	169	+11·7	—5·0	—0·8	—11·3	+12·5	+4·1
Jaisalmer ..	16,062	76,255	5	+7·0	—36·6	+20·4	—23·4	+12·7	—29·5
Jhalawar ..	810	107,890	133	+0·5	—40·3	+0·8	—0·1	+12·2	—28·2
Karauli ..	1,242	140,525	113	+5·3	+0·1	—6·5	—8·8	+5·1	—5·5
Kishangarh ..	858	85,744	100	+11·4	—27·5	—4·2	—10·8	+10·3	—23·9
Kotah ..	5,684	685,804	121	+1·6	—24·2	+17·3	—1·4	+8·8	—3·0
Kushalgarh ..	340	35,564	105	..	+180·9	+35·6	+32·5	+22·0	+515·8
Lawa ..	19	2,790	147	+25·3	—20·5	—4·0	—11·8	+23·3	+4·0
Marwar ..	35,016	2,125,982	61	+43·8	—23·4	+6·3	—10·5	+15·4	+21·0
Mewar ..	12,694	1,566,910	123	+23·5	—44·8	+25·8	+6·7	+14·6	+4·9
Partabgarh ..	886	75,539	86	+10·6	—40·9	+20·5	+7·0	+14·1	—3·8
Shahpura ..	405	54,233	134	+23·0	—32·0	+11·1	+1·5	+12·7	+4·8
Sirohi ..	1,058	216,528	111	+33·5	—19·9	+22·8	+1·0	+16·0	+51·5
Tonk ..	2,553	317,360	124	+12·4	—28·1	+10·0	—5·0	+10·2	—6·1

* 1801—1931.

has actually suffered a loss of population since 1921. Throughout Rajputana there was a general absence of scarcity and epidemic disease throughout the decade and although the prices of grain ruled high the growth of population does not seem to have been adversely affected. The high prices were in some States dealt with by the prohibition of exports and in others by the imposition of a tax on imported food stuffs. Wages were high, particularly in the case of the industrial population.

Western
India
States.

32. The Western India States Agency, about the size of Hungary with half the population, was constituted as a separate unit in 1924 before which its census returns were incorporated with those of Bombay, with which province its economic conditions have been comparable throughout the decade. Its area is 35,442 sq. miles and its population 3,999,250 with a mean

density of 113 per sq. mile. It includes the civil stations of Rajkot

State or Agency.	Area in sq. miles.	Popu- lation.	Den- sity.	Variation of the population per cent.					
				1881-91.	1891-01.	1901-11.	1911-21.	1921-31.	1881- 1931.
W. I. St. Agency	35,442	3,999,250	113	+15	-17	+7	+0.5	+13	+17
Bhavnagar ..	2,961	500,274	169	+17	-12	+7	-3	+17	+25
Cntch ..	8,250	514,307	62	+9	-13	+5	-6	+6	+0.4
Dhrangadhra ..	1,156	88,961	77	+4	-32	+12	+12	+0.6	-11
Dhrol.. ..	283	27,639	98	+21	-19	+11	-3	+17	+24
Gondal ..	1,024	205,846	201	+19	+1	-1	+3	+23	+52
Jafarabad ..	53	12,083	228	+32	-2	+2	-11	+10	+28
Junagadh ..	3,284	545,152	166	+25	-18	+10	+7	+17	+41
Limbdi ..	344	40,088	117	+12	-35	+8	+5	+13	-7
Morvi ..	870	113,023	130	+17	-17	+3	+1	+24	+26
Nawanagar ..	3,791	409,192	108	+20	-11	+4	-1	+19	+29
Palanpur ..	1,769	264,179	149	+17	-19	+2	+5	+12	+13
Palitana ..	300	62,150	207	+23	-13	+15	-5	+7	+26
Porbandar ..	636	115,673	182	+21	-4	+11	+11	+14	+62
Radhanpur ..	1,150	70,530	61	-0.1	-37	+7	+3	+4	-28
Rajkot ..	282	75,540	268	+7	-0.3	+2	+20	+24	+62
Wadhwan ..	236	42,602	181	-0.1	-18	+3	+6	+12	+0.2
Wankaner ..	417	44,259	106	+29	-30	+19	+13	+20	+45
Banas Kantha Agency ..	3,475	203,553	59	+8.4	-34	-16	+1	-2	-40.5
Eastern Kathia- war Agency	2,764	282,468	102	..	..	..	-2	+12	+10*
Western Kathia- war Agency	2,397	381,731	159	..	..	..	-4	+10	+6*

* 1911—1931.

while the smallest of the non-jurisdictional estates is only one-third of a square mile in area and has a population of less than 200. The rainfall comes late in the monsoon and varies from moderately good to scanty and deficient, and density therefore varies accordingly from 268 in Rajkot to 59 in the Banas Kantha Agency where it is a wonder “that so many persons can find a livelihood in so little favoured a terrain”. On this occasion separate figures have been compiled for 43 units, but complete data for all details for fifty years has proved impossible to obtain and even for some sub-agency groups the changes could not be filled in back to 1881. In the whole Agency there are only 66 towns, 11 of which are in Bhavnagar State ; Bhavnagar itself and Jamnagar in Nawanagar are the only two towns of over 50,000 inhabitants and there are only ten others of over 20,000, is so that it is clear that the Agency, though essentially rural and agricultural, is less so than those of Central India and Rajputana ; and so much of its population is located in towns that its degree of urbanization is just about the same as that of Bombay Presidency.

33. The Punjab States Agency and the States in political relation with Provincial Governments are treated with the provinces with which they are associated and Sikkim State with Bengal. Figures of the area and population of the larger States will be found in the supplements to Tables I and II in Part ii of this volume.

Other States.

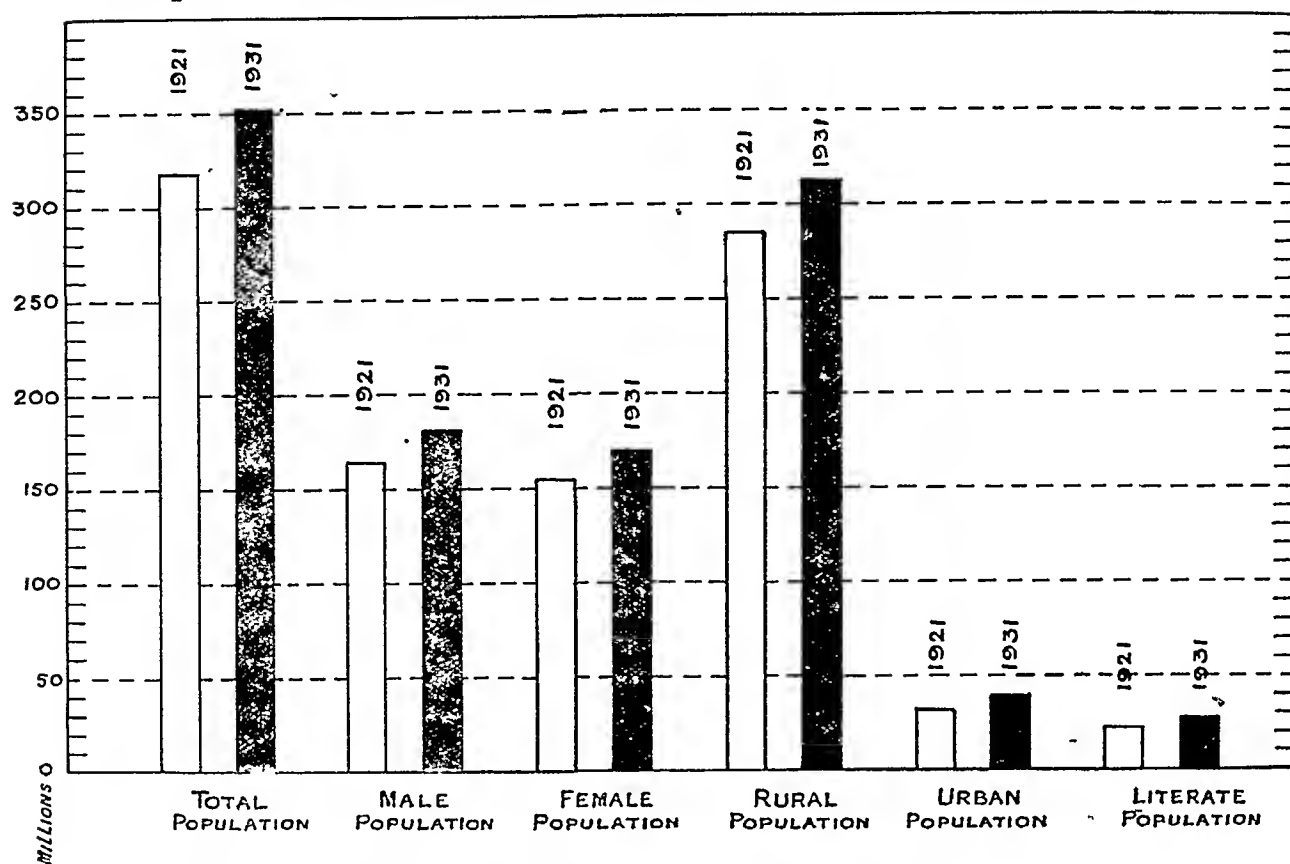
Section iv.—Population problem.

34. Attention has already been drawn to the grave increase in the population of this country. The actual figure of the increase alone is little under thirty-four million, a figure approaching equality with that of the total population of France or Italy and appreciably greater than that of such important European powers as Poland and Spain. . The population now even exceeds the latest estimate of the population of China, so that India now heads the list of all the countries in the world in the number of her inhabitants. This increase, however, is from most points of view a cause for alarm rather than for satisfaction. The total literate population of India in 1921 was 22,623,651 and is now 28,131,315, so that the mere increase of population during the intervening period has exceeded the former figure by 11 million, that is by 50 per cent., and still exceeds the latter by 20 per cent.

Nature of the problem.

and Wadhwan under the administrative control of the Agent to the Governor-General and 202 States and estates, of which 85 have their own rights of jurisdiction, while the others are grouped in thanas each under a thanadar. Of the 85 jurisdictional States 17 are salute States varying greatly in size from Cutch with an area of 8,250 sq. miles to Jafarabad with only 53,

Even in Travancore State, where the percentage of literacy is much higher than in most parts of India, but where the population has increased by 27 per cent., the



proportion of literacy has fallen from 24·2 per cent. in 1921 to 23·9 per cent. in 1931 though in India as a whole it has risen from 7 per cent. to 8 per cent.

Recent writers on the population question in India, *e.g.*, Wattal and Ranadive, have directed their attention primarily to the question of food production. Their argument is that the population of India is already living permanently on the verge of scarcity and any increase is bound to result in an insufficiency of the food supply. Recent experience, however, throws doubt on this theory; the general slump in the price of food, and the difficulty found by cultivators in selling their produce, suggest that the danger of a shortage of the food supply is not the most serious aspect of the question. It is not argued that this is not a danger to be reckoned with, and in any case the maximum population possible is very far from identical with the maximum population desirable, since the rise of population on the subsistence margin must reduce the standard of living, but it would seem that the point has not yet been reached at which the ability of the country to feed its occupants is seriously taxed. The position of economists in regard to the west now appears to be that "the devastating torrent of babies" is being reduced to a trickle, and that even if it were swelled again the rapid developments both mechanical and biological that are taking place in the world production of food, would be more than sufficient to cope with the flood, so that it is progressively easier to obtain subsistence. It may be doubted whether either supposition is yet applicable to Indian conditions. In the first place there are as yet no indications of any tendency on the part of the countryman to modify his view of the blessedness of the man who has a quiverful of sons and is not ashamed to meet his enemy in the gate, and, in the second, little sign that agriculture is likely to be appreciably affected during the next decade by means such as those which have so greatly increased wheat production on the American continent. It is however obvious that apart from the law of diminishing returns the ability of agriculture to provide an occupation is limited. In Europe it has been estimated that the maximum population which can be supported by agricultural occupations is 250 to the sq. mile, while an estimate of somewhat higher density has been made in the case of the United States of America, and the island of Porto Rico in the West Indies has an agricultural population of nearly 400 to the sq. mile. The number is, as we have seen, very

much greater than this in many parts of India, and the rural population which attains the extraordinary density mentioned of parts of Bengal and of the Malabar Coast indicates the extent to which fertile land intensively cultivated together with fish-yielding waters could sustain a population whose material wants are reduced to the minimum by the natural environment of a tropical climate. These, of course, are extreme cases taken from the two most fertile parts of India,* but generally speaking the maximum density of the agricultural population can be far greater in India than in Europe, not only on account of the greater fertility of the land but on account of the diminution in the absolute necessities of life corresponding to a less rigorous climate. The real difficulty is that to cultivate on anything like economic lines the number of individuals that can work on a given area of ground is limited; and though the food product may be ample for many more than that number, a large increase in the population must either lead to excessive subdivision of the areas cultivated, and so to a diminution in production on account of uneconomic holdings, or on the other hand, to a floating population which is not engaged in agriculture and which has nothing to exchange with the producers for the food which it requires. The employment of this surplus in industrial activity would of course, meet the difficulty for a time, but can only prove a permanent cure if the increase of the population be limited not only to the food producible but also to the saturation point of the demand for industrial labour. When the latter point is passed, as in the United Kingdom, where the increase in population during the last decade was approximately equivalent to the number of unemployed in 1931, unemployment will arise and the fact that the food supply is adequate is to this extent irrelevant. As in some parts of Europe, life on the land as a cultivator is an end in itself rather than a mere means of production of victuals, hence the real danger of a growth of population which must suffer discomfort because this end becomes rapidly more difficult of realisation. The present problem in India would therefore seem to be less the actual total increase of the population, than the increase of that portion of the population, by far the greater part of course, which is occupied in agriculture and allied pursuits, i.e., the population represented by sub-class I of the Occupation Table; and an additional complication of the problem appears in the fact that the cultivating classes in India generally lack the capital required for the extension of cultivation beyond the existing margin, particularly where the cultivation practised is already dependent on a somewhat problematic rainfall. Mechanical improvements which reduce the need for labour are a doubtful palliative, though no such doubt attaches to biological improvements, enabling a better crop to be obtained from a smaller area. Labour-saving devices will do little for a peasantry whose work takes up part only of the year and certainly they will not enable a greater number of peasants to live on the same area of land where there is neither demand nor market facilities for the minor products of agriculture which contribute to the income of the European small holder or on which, such as poultry, pigs or potatoes, he may principally depend.

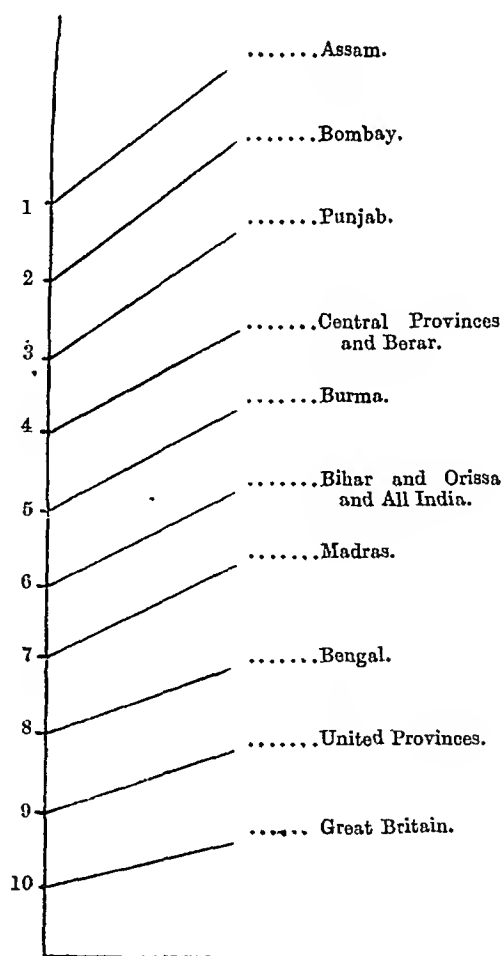
35. It appears to be the general opinion of Indian economists who discuss the population problem of this country that the only practical method of limiting the population is by the introduction of artificial methods of birth control, though it is not easy to exaggerate the difficulties of introducing such methods in a country where the vast majority of the population regard the propagation of male offspring as religious duty and the reproach of barrenness as a terrible punishment for crimes committed in a former incarnation. It is justly pointed out by the Census Superintendent of Mysore State that the practice of universal and of early marriage is a social custom and is not, in fact, followed from religious motives, but it is almost always religious arguments which are put forward in opposition to a change in social custom by any society anywhere, and though the religious sanction may be the result rather than the cause of the social custom, this fact only gives the sanction greater force. Nevertheless a definite movement towards artificial birth-control appears to be taking place and is perhaps less hampered by misplaced prudery than in some countries which claim to be more civilized; thus not only is artificial control publicly advocated by a number of medical writers but Madras can boast a Neo-Malthusian League with two Maharajas, three High Court judges and four or five men very prominent

Remedies.

* An examination of the population question as regards Bengal by the Census Superintendent of that province is printed as an appendix to this chapter.

in public life as its sponsors. Meanwhile it would appear, in view of the present rate of increase, that efforts to reduce the rate of infantile mortality should be preceded by precautions to reduce the birth-rate, and that if the luxury of 'baby weeks' be permitted they should at least be accompanied by instruction in birth-control. A move in this direction has already been made by the Government of Mysore State, which in 1930 sanctioned the establishment of birth-control clinics in the four principal hospitals of the State.

There are perhaps other methods of checking an excessive increase in population. It has been clearly demonstrated in Europe that a rise of the standard in living is normally accompanied by a fall in the birth-rate, and the same principle no doubt operates in this country; but, even while we must admit the truth of Bacon's aphorism that "Repletion is an Enemy to Generation", a mere superfluity of food supply is not enough, as it only enables the possessor to breed up to the subsistence level again. In order that a higher standard of living may affect the rate of reproduction it is apparent that not only is an increase in education and culture involved, since it seems definitely established that intellectual activity acts as a check upon fertility, but also the psychological appreciation of a higher probability of survival. Recent studies of the population problem in the Pacific by Rivers, Pitt-Rivers, Roberts and others have clearly demonstrated the importance of psychological factors as affecting the increase or decrease of the population, and although the environment is generally entirely different in India, that is no reason for supposing that psychology is any less important here in its action on the rate of reproduction. It is also likely that a changed outlook, in which a greater value was attached to the goods of this world and less regard paid to the speculative possibilities of the next, would operate in the same direction; but it seems doubtful if a materialistic standpoint would commend itself to Indian culture.



Population Increase 1921-31
(with acknowledgments to the S. C. O., Madras).

SUBSIDIARY TABLE I.

Area of India and the Provinces and States.

Province, State or Agency.	Area in Square Miles.			Variation : Increase+, Decrease—.	
	1931.	1921.	1881.	1921-1931.	1881-1931.
INDIA	1,808,679	1,805,332	1,372,588	+3,347	+436,091
Provinces	1,096,171	1,094,300	911,075	+1,871	..
Ajmer-Merwara	2,711	2,711	2,711	..	..
Andaman and Nicobar Islands	3,143	3,143	..	..	..
Assam	55,014	53,015	*46,341	+1,999	+20,993
Baluchistan (<i>District and Administered Territories</i>).	54,228	54,228	..	..	..
Bengal	77,521	76,843	*193,198	+678	+1,459
Bihar and Orissa	83,054	83,161		—107	
Bombay (<i>including Aden</i>)	123,679	123,621	†124,122	+58	..
Aden	80	80	..	..	..
Burma	233,492	233,707	87,220	—215	+146,272
Central Provinces and Berar	99,920	99,876	102,156	+44	—2,236
Coorg	1,593	1,582	1,583	+11	+10
Madras	142,277	142,260	141,001	+17	+2,869
North-West Frontier Province (<i>Districts and Administered Territories</i>).	13,518	13,419	106,632	+99	+6,659
Punjab	99,200	99,846		—646	
Delhi	573	593	106,111	—20	+137
United Provinces of Agra and Oudh	106,248	106,295		—47	
States and Agencies	712,508	711,032	461,513	+1,476	..
Assam States	12,320	8,456	..	+3,864	..
Baluchistan States	80,410	80,410	..	..	..
Baroda State	8,164	8,127	8,570	+37	—406
Bengal States	5,434	5,434	..	..	..
Bihar and Orissa States	28,648	28,648	..	..	..
Bombay States	27,994	27,982	73,753	+12	—10,317
Central India Agency	51,597	51,531	75,079	+66	+2,885
Gwalior State	26,367	26,357		+10	
Central Provinces States	31,175	31,176	28,834	—1	+2,341
Hyderabad State	82,698	82,698	71,771	..	+10,927
Jammu and Kashmir State	84,516	84,258	..	+258	..
Madras States Agency	10,698	10,696	..	+2	..
Cochin State	1,480	1,479	1,361	+1	+119
Travancore State	7,625	7,625	6,730	..	+895
Other Madras States	1,593	1,592	‡	+1	..
Mysore State	29,326	29,475	24,723	—149	+4,603
North-West Frontier Province (<i>Agencies and Tribal Areas</i>).	22,838	25,500	35,817	—2,662	+24,082
Punjab States	5,820	5,820		..	
Punjab States Agency	31,241	31,239	129,750	+2	—691
Rajputana Agency	129,059	128,987		+72	
Sikkim State	2,818	2,818	..	..	..
United Provinces States	5,943	5,949	5,125	—6	+818
Western India States Agency	35,442	35,471	§	—29	..

NOTE.—The difference in areas is due in cases to the use of revised survey figures and to corrections for fluvial action and also to inter-provincial transfers, *vide* explanatory notes to Imperial Tables I and II in Part II.

* Inclusive of States; † Excludes Aden; ‡ Included against Madras; § Included against Bombay States.

SUBSIDIARY TABLE II.

The population of India at six Censuses.

				INDIA.	Provinces.	States.
Total Population	..	..	1931	352,837,778	271,526,933	81,310,845
			1921	318,942,480	246,856,191	72,086,289
			1911	315,156,396	243,797,647	71,358,749
			1901	294,861,056	231,142,489	63,218,567
			1891	287,314,671	220,765,285	66,549,386
			1881	253,896,380	198,448,631	55,447,699
Males	..	..	1931	181,828,923	139,931,556	41,897,367
			1921	163,995,554	126,798,887	37,196,667
			1911	161,338,935	124,641,244	36,697,691
			1901	149,951,824	117,426,782	32,525,042
			1891	146,769,629	112,335,393	34,434,236
			1881	129,949,300	101,119,128	28,830,172
Females	..	..	1931	171,008,855	131,595,377	39,413,478
			1921	154,946,926	120,057,304	34,889,622
			1911	153,817,461	119,156,403	34,661,058
			1901	144,409,232	113,715,707	30,693,525
			1891	140,545,042	108,429,892	32,115,150
			1881	123,947,030	97,829,503	26,617,527
The above figures are inclusive of the population of areas newly enumerated at successive censuses as follows :—						
Total population of new areas in	..	..	1891	5,713,902*	3,112,994	2,600,908
			1901	2,672,077†	1,654,377	1,017,700
			1911	1,793,365	94,495	1,698,870
			1921	86,633	86,633	....
			1931	35,058‡	35,058	....
			1891	2,872,513	1,507,043	1,365,470
Male population of new areas in	..	..	1901	1,362,651	837,440	525,211
			1911	945,346	47,581	897,765
			1921	43,781	43,781	....
			1931	9,746	9,746	....
			1891	2,793,074	1,605,951	1,187,123
			1901	1,283,297	790,808	492,489
Female population of new areas in	..	..	1911	848,019	46,914	801,105
			1921	42,852	42,852	....
			1931	9,601	9,601	....

NOTE.—The details of the areas newly included at the 1921 and previous censuses will be found on the fly leaf of Table II in the 1921 India Tables Volume. Details of the 1931 figures will be found on the title page to Imperial Table II of the recent tables volume.

* Sex details of 48,315 persons are not available.

† Sex details of 26,129 persons are not available.

‡ Sex details of 15,711 persons are not available.

SUBSIDIARY TABLE III.

Calculated Intercensal Population, 1922=1930.

Year.	1922.	1923.	1924.	1925.	1926.	1927.	1928.	1929.	1930.
Population	318,975,613	319,041,879	319,174,412	319,439,478	319,969,610	321,029,873	323,150,400	327,391,454	335,873,562

SUBSIDIARY TABLE IV.

Population distributed by provinces and with variation per cent. in the population and mean density per square mile.

Serial No.	Province, State or Agency.	Area in Square Miles.	Population.				Percentage of Variation.				Mean Density per cent. Square mile.		
							Increase +, Decrease—						
			1931.			1921.	1921-31.	1911-21.	1881-1931.	1931.	1921.	1911.	
			Persons.	Males.	Females.	Both Sexes.							
1	2	3	4	5	6	7	8	9	10	11	12		
	INDIA ..	1,808,679	352,837,778	181,828,923	171,008,855	318,942,480	+10.6	+1.2	+39.0	195	176	174	
	Provinces ..	1,096,171	271,528,933	139,931,556	131,595,377	246,856,191	+10.0	+1.3	+36.8	248	225	222	
1	Ajmer-Merwara ..	2,711	560,292	296,081	264,211	495,271	+13.1	—1.2	+21.6	207	183	185	
2	Andaman and Nicobar Islands.	3,143	29,463	19,702	9,761	27,086	+8.8	+2.4	+101.4	9	9	8	
3	Assam	55,014	8,622,251	4,537,206	4,085,045	7,459,128	+15.6	+13.4	+79.2	157	136	120	
4	Baluchistan ..	54,228	463,508	270,004	193,504	420,648	+10.2	+1.5	+21.3*	9	8	8	
5	Bengal	77,521	50,114,002	26,041,698	24,072,304	46,702,307	+7.3	+2.7	+37.9	646	602	587	
6	Bihar and Orissa ..	83,054	37,677,576	18,794,138	18,883,438	33,995,418	+10.8	—1.4	+21.6	454	409	415	
7	Bombay Presidency including Aden.	123,679	21,930,601	11,535,903	10,394,698	19,348,219	+13.3	—1.8	+32.8	177	156	159	
8	Burma	233,492	14,667,146	7,490,601	7,176,545	13,212,192	+11.0	+9.1	+292.5	63	57	53	
9	Central Provinces and Berar.	99,920	15,507,723	7,761,818	7,745,905	13,912,760	+11.5	—0.0	+29.8	155	139	139	
10	Coorg	1,593	163,327	90,575	72,752	163,838	—0.3	—6.4	—8.4	103	103	110	
11	Delhi	573	636,246	369,497	266,749	488,452	+30.3	+18.0	+81.3	1,110	852	722	
12	Madras	142,277	46,740,107	23,082,999	23,657,108	42,318,985	+10.4	+2.2	+51.6	328	297	291	
13	North-West Frontier Province (Districts and Administered Territories).	13,518	2,425,076	1,315,818	1,109,258	2,251,340	+7.7	+2.5	+53.9	179	167	163	
14	Punjab	99,200	23,580,852	12,880,510	10,700,342	20,685,478	+14.0	+5.7	+39.2	238	209	197	
15	United Provinces of Agra and Oudh.	106,248	48,408,763	25,445,006	22,963,757	45,375,069	+6.7	—3.1	+10.6	456	427	440	
	States and Agencies ..	712,508	81,310,845	41,897,367	39,413,478	72,086,289	+12.8	+1.0	+46.6	114	101	100	
16	Assam States ..	12,320	625,606	306,927	318,679	531,118	+17.8	+10.2	+96.8	51	43	39	
17	Baluchistan States ..	80,410	405,109	218,410	186,699	378,977	+6.9	—9.8	—5.5*	5	5	5	
18	Baroda State ..	8,164	2,443,007	1,257,817	1,185,190	2,126,522	+14.9	+4.6	+12.0	299	260	249	
19	Bengal States ..	5,434	973,336	516,162	457,174	896,926	+8.5	+9.0	+39.4	179	165	151	
20	Bihar and Orissa States	28,648	4,652,007	2,288,422	2,363,585	3,959,669	+17.5	+0.4	+93.0	162	138	138	
21	Bombay States ..	27,994	4,468,396	2,288,623	2,179,773	3,867,819	+15.5	+0.1	+28.2	160	138	138	
22	Central India Agency	51,597	6,632,790	3,405,438	3,227,352	6,002,551	+10.5	—2.1	+22.0*	129	116	119	
23	Central Provinces States.	31,175	2,483,214	1,235,385	1,247,829	2,066,900	+20.1	—2.4	+79.0	80	66	68	
24	Gwalior State ..	26,367	3,523,070	1,867,031	1,656,039	3,193,176	+10.3	—1.3	+14.6*	134	121	123	
25	Hyderabad State ..	82,698	14,436,148	7,370,010	7,066,138	12,471,770	+15.8	—6.8	+46.6	175	151	162	
26	Jammu and Kashmir State	84,516	3,646,243	1,938,338	1,707,905	3,320,518	+9.8	+5.1	+43.3†	43	39	37	
27	Madras States Agency	10,698	6,754,484	3,373,032	3,381,452	5,460,312	+23.7	+13.5	+101.9	631	510	450	
	Cochin State ..	1,480	1,205,016	589,813	615,203	979,080	+23.1	+6.6	+100.7	814	662	620	
	Travancore State ..	7,625	5,095,973	2,565,073	2,530,900	4,006,062	+27.2	+16.8	+112.2	668	525	450	
	Other Madras States	1,593	453,495	218,146	235,349	475,170	—4.6	+2.2	+32.1	285	298	292	
28	Mysore State ..	29,326	6,557,302	3,353,963	3,203,339	5,978,892	+9.7	+3.0	+56.6	224	204	198	
29	North-West-Frontier Province (Agencies and Tribal Areas).	22,858	2,259,288	1,212,347	1,046,941	2,825,136	—20.0	+74.2	+2,590.8*	99	124	71	
30	Punjab States ..	5,820	437,787	229,290	208,497	408,019	+7.3	—1.0	+21.5	75	70	71	
31	Punjab States Agency	31,241	4,472,218	2,451,394	2,020,824	4,008,017	+11.6	+5.5	+27.7	143	128	122	
32	Rajputana Agency ..	129,059	11,225,712	5,885,028	5,340,684	9,831,755	+14.2	—6.5	+11.1	87	76	82	
33	Sikkim State ..	2,818	109,808	55,825	53,983	81,721	+34.4	—7.1	+260.5†	39	29	31	
34	United Provinces States.	5,943	1,206,070	618,171	587,899	1,134,881	+6.3	—4.6	+9.7	203	191	200	
35	Western India States Agency.	35,442	3,999,250	2,025,754	1,973,496	3,541,610	+12.9	+0.5	+16.5	113	100	99	

* Variation calculated from 1901-1931.

† Variation calculated from 1891-1931.

SUBSIDIARY TABLE V.

Variation in Natural Population 1921—1931.

Province, State or Agency.	Population in 1931.				Population in 1921.				Variation per cent. (1921-1931) in Natural population Increase (+) Decrease (—).
	Actual population.	Immigrants.	Emigrants.	Natural population.	Actual population.	Immigrants.	Emigrants.	Natural population.	
1	2	3	4	5	6	7	8	9	10
INDIA ..	352,837,778	732,204	656,709	352,763,925	318,885,980	603,526	1,050,951	319,333,405	+10.5
Ajmer-Merwara ..	560,292	106,444	60,909	514,757	495,271	109,890	42,420	427,801	+20.3
Andaman and Nicobar Islands	29,463	14,745	553	15,271	27,086	15,120	316	12,282	+24.3
Assam ..	9,247,857	1,408,763	74,001	7,913,095	7,990,246	1,290,157	75,978	6,776,067	+16.8
Baluchistan ..	868,617	90,053	42,771	821,335	799,625	78,387	60,421	781,659	+5.1
Bengal ..	51,087,338	1,853,708	960,017	50,193,647	47,592,462	1,929,640	697,047	46,359,869	+8.3
Bihar and Orissa ..	42,329,583	509,837	1,758,290	43,578,036	37,961,858	422,244	1,955,048	39,494,662	+10.3
Bombay (including Aden—1931 figures only).	26,398,997	1,250,461	601,469	25,750,005	26,701,148	1,081,649	592,009	26,211,508	—1.8
Burma ..	14,667,146	775,963	24,368	13,915,551	13,212,192	706,725	20,295	12,525,762	+11.1
Central Provinces and Berar	17,990,937	655,574	422,176	17,757,539	15,979,660	609,504	407,294	15,777,450	+12.6
Coorg ..	163,327	38,718	3,233	127,842	163,838	83,937	2,852	132,753	—0.4
Delhi ..	636,246	263,188	69,478	442,536	488,188	185,770	69,350	371,768	+19.0
Madras ..	47,193,602	267,195	1,199,812	48,126,219	42,794,155	209,862	1,756,462	44,340,755	+8.5
North-West Frontier Province ..	4,684,364	159,166	90,892	4,616,090	5,076,476	157,562	84,495	5,003,409	—7.7
Punjab (including Agency)	28,490,857	674,152	707,478	28,524,183	25,101,060	627,137	549,429	25,023,352	+14.0
United Provinces of Agra and Oudh.	49,614,833	559,605	1,557,954	50,613,182	46,510,668	480,414	1,402,541	47,432,795	+6.7
Baroda State ..	2,443,007	324,579	205,202	2,323,630	2,126,522	232,494	221,602	2,115,630	+9.8
Central India Agency	6,632,790	600,766	482,564	6,514,588	5,997,023	548,094	486,643	5,935,572	+9.8
Cochin State ..	1,205,016	87,417	48,240	1,165,839	979,080	39,759	28,338	967,659	+20.5
Gwalior State ..	3,523,070	281,550	296,835	3,538,355	3,186,075	290,340	289,029	3,184,764	+11.1
Hyderabad State ..	14,436,148	247,795	332,856	14,521,209	12,471,770	202,781	363,751	12,632,740	+1.5
Jammu and Kashmir State	3,646,243	64,196	94,520	3,676,567	3,320,518	63,420	84,291	3,341,389	+10.0
Mysore State ..	6,557,302	344,592	125,496	6,338,206	5,978,892	314,531	102,104	5,766,465	+9.9
Rajputana Agency ..	11,225,712	330,939	846,866	11,741,639†	9,844,384	243,002	868,117	10,469,499	+12.2
Sikkim State ..	109,808	15,417	7,213	101,604	81,721	22,978	4,133	62,876	+61.6
Travancore State ..	5,095,973	135,103	53,336	5,014,206	4,006,062	73,591	30,250	3,962,721	+26.5
Western India States Agency	3,999,250	109,674	294,345	4,183,921	*	*	*	*	..

NOTES.—(i) The figures for the Provinces are inclusive of the States attached to them except in the case of Madras where they exclude Cochin and Travancore.

(ii) The 1921 figures against Bombay exclude details for Aden for which unit no birthplace table was prepared at that census.

(iii) Columns 2 and 6.—Persons not enumerated by birthplace or whose birthplace was not returned have been included in these columns.

(iv) Column 4.—The figures against India in this column represent emigrants to foreign countries details of which will be found in subsidiary table 4 to Chapter III.

* Separate figures are not available as this unit was combined with the Bombay States in 1921.

† Includes persons enumerated in the Colonies who returned Ajmer-Merwara as their birthplace.

SUBSIDIARY TABLE VI.

Comparison of Areas and Population of Districts in Main Province.

Province.	Number of districts.	Area and Population of Districts.			Maximum Population.		Number of districts with population exceeding one million.
		Average Area.	Average population.	Maximum Area in square miles.			
Assam ..	12	4,584.5	718,521	Lushai Hills ..	8,092	Sylhet ..	1
Baluchistan ..	6	9,038	77,251	Chagai ..	20,036	Quetta-Pishin ..	Nil.
Bengal ..	28	2,768.6	1,789,786	Mymensingh ..	6,237	Mymensingh ..	24
Bihar and Orissa ..	21	3,955	179,417	Ranehi ..	7,102	Darbhangha ..	16
Bombay (excluding Aden)	28	4,414.3	781,397	Thar and Parkar ..	13,636	Ratnagiri ..	8
Burma ..	41	5,694.9	357,735	Southern Shan States ..	36,416	Southern Shan States ..	Nil.
Central Provinces and Berar.	22	4,541.8	704,897	Raipur ..	9,717	Raipur ..	2
Madras ..	26	5,472.2	1,797,696	Agency Division ..	19,869	Malabar* ..	22
North-West Frontier Province.	5	2,703.6	485,015	Dera Ismail Khan ..	3,471	Peshawar ..	Nil.
Punjab ..	29	3,420.7	813,133	Kangra ..	9,976	Lahore ..	6
United Provinces of Agra and Oudh.	48	2,213.5	1,008,516	Garhwal ..	5,612	Gorakhpur ..	22

* Including Laccadives.

SUBSIDIARY TABLE VII.

Persons per House and Houses per square mile.

Province, State or Agency.	Average number of Persons per House.					Average number of Houses per square mile.				
	1931.	1921.	1911.	1901.	1891.	1931.	1921.	1911.	1901.	1891.
INDIA	5.0	4.9	4.9	5.2	5.4	39.3	36.1	35.8	31.6	33.9
Ajmer-Merwara	4.6	4.2	4.1	4.4	5.3	45.1	43.3	45.3	39.6	37.5
Andaman and Nicobar Islands	5.2	8.2	7.2	..	..	1.8	1.1	1.2	..	..
Assam	4.9	4.7	4.6	4.6	4.8	28.2	27.4	25.0	23.1	22.8
Baluchistan	5.2	5.0	4.9	4.5	..	1.2	1.2	1.3	2.3	..
Bengal	4.7	5.1	5.3	5.2	5.2	131.8	113.6	104.5	100.2	96.0
Bihar and Orissa	5.2	5.1	5.2	5.3	5.7	73.2	67.0	66.5	62.2	71.4
Bombay (including Aden)	5.1	4.9	4.9	5.1	5.4	34.4	29.3	29.5	26.5	25.6
Aden	8.4	8.3	..	..	..	76.6	85.5	..	..	..
Burma	4.7	4.8	4.9	5.0	5.3	13.4	11.7	10.7	8.8	8.3
Central Provinces and Berar	5.0	5.0	4.9	4.8	5.0	27.4	24.3	24.8	21.3	22.5
Coorg.. ..	4.8	5.2	5.2	5.9	6.4	21.3	19.8	21.3	19.3	16.9
Delhi	4.6	4.3	a	a	a	242.4	193.4	a	a	a
Madras	5.1	5.1	5.3	5.4	5.3	64.9	58.5	55.0	50.3	47.6
*North-West Frontier Province	5.0	5.2	5.0	6.1	6.1	36.0	32.6	32.4	21.3	17.9
Punjab	4.8	4.5	4.5	6.2	6.6	47.5	43.9	43.0	29.7	27.2
United Provinces of Agra and Oudh	4.8	4.6	4.6	5.5	5.7	92.7	90.8	92.3	78.7	74.2
Baroda State	4.3	4.1	4.0	4.0	4.5	68.9	63.1	61.9	60.5	65.5
Central India Agency	4.6	4.5	4.6	5.1	5.2	27.8	25.6	26.4	21.5	25.2
Cochin State	5.8	5.5	5.6	5.6	5.4	140.2	120.5	120.0	107.1	96.1
Gwalior State	4.6	4.5	b	b	b	29.1	27.2	b	b	b
Hyderabad State	4.4	4.6	4.9	4.9	5.0	40.1	32.9	32.8	27.6	27.6
Jammu and Kashmir State	5.4	5.5	5.7	6.3	5.7	7.9	7.1	6.6	5.7	5.5
Mysore State	5.0	5.0	5.0	4.9	5.5	44.7	40.6	39.3	37.7	32.0
Punjab States Agency	4.7	4.5	4.4	a	a	30.6	28.5	28.0	a	a
Rajputana Agency	4.7	4.3	4.3	5.1	5.5	18.5	17.6	18.9	15.0	16.7
Sikkim State	4.1	5.5	5.3	5.3	..	9.6	5.2	5.9	3.9	..
Travancore State	5.5	5.3	5.2	5.1	5.0	122.0	99.9	87.3	81.9	76.8
Western India States Agency	4.7	c	c	c	c	24.2	c	c	c	c

a. Included against Punjab.

b. Included against Central India Agency.

c. Included against Bombay.

* Excludes the Agencies and Tribal Areas where it has not been possible to ascertain the number of occupied houses.

SUBSIDIARY TABLE VIII.

Comparison between Census figures and Vital Statistics.

Province or State.	In 1921-30 total number of		Number per mille of population of 1921 of		Excess (+) or Deficiency (—) of Births over Deaths.	Increase (+) or Decrease (—) of population of 1931 compared with 1921.	
	Births.	Deaths.	Births.	Deaths.		Natural population.	Actual population.
1	2	3	4	5	6	7	8
Assam	2,079,593	1,628,739	303.5	237.7	+450,854	+892,464	+1,163,123
Bengal	13,255,369	11,791,885	284.9	253.5	+1,463,484	+3,787,656	+3,411,695
Bihar and Orissa	12,347,593	9,093,498	363.1	267.4	+3,254,095	+3,343,122	+3,682,158
Bombay (excluding Aden)	6,872,564	5,144,403	358.6	268.4	+1,728,161	+2,709,477	+2,587,404
Burma	2,980,296	2,264,838	275.4	209.3	+715,458	+1,432,906	+1,454,954
Central Provinces and Berar	6,083,012	4,659,404	437.2	334.9	+1,423,608	+1,646,032	+1,594,963
Delhi	217,661	164,529	434.9	328.7	+53,132	+70,768	+147,794
Madras	14,210,900	9,811,998	346.6	239.3	+4,398,902	+3,798,759	+4,421,122
North-West Frontier Province	599,824	505,065	280.9	236.5	+94,759	+206,308	+173,736
Punjab	8,658,686	6,230,304	422.0	303.7	+2,428,382	+3,099,356	+2,895,374
United Provinces	15,921,016	11,993,248	350.9	264.3	+3,927,768	+3,102,582	+3,033,694
Baroda State	582,578	446,906	274.0	210.2	+135,672	+207,992	+316,485
Cochin State.. ..	142,516	91,233	145.6	93.2	+51,283	+198,180	+255,936
Hyderabad State	1,143,632	1,279,679	91.7	102.6	—136,047	+1,888,290	+1,964,378
Mysore State	1,125,590	960,862	188.3	160.7	+164,728	+571,662	+578,410
Travancore State	819,173	446,319	204.5	111.4	+372,854	+1,051,485	+1,089,911

SUBSIDIARY TABLE IX.

Reported birth-rate per mille* during the decade 1921-30 in the main Provinces.

Province.	Number of Births (both sexes) per mille in										Average Birth rate per mille during the decade.
	1921.	1922.	1923.	1924.	1925.	1926.	1927.	1928.	1929.	1930.	
1	2	3	4	5	6	7	8	9	10	11	12
Assam	29.6	28.4	28.8	31.0	29.1	30.8	30.3	31.2	32.8	31.4	30.3
Bengal	28.0	27.4	29.9	29.5	29.6	27.4	27.7	29.6	29.3	26.6	28.5
Bihar and Orissa ..	34.6	35.0	37.0	35.7	35.6	37.2	37.6	38.3	35.6	36.2	36.3
Bombay	32.6	32.4	35.6	35.6	34.7	37.1	36.9	38.2	38.3	37.4	35.9
Burma	30.9	30.7	29.5	27.4	25.4	27.6	25.1	25.9	26.4	28.9	27.8
Central Provinces and Berar	37.9	35.8	45.6	44.2	43.9	46.0	45.6	46.5	44.0	47.7	43.7
Delhi	40.6	41.2	42.1	42.4	41.6	41.0	40.5	48.3	47.9	49.3	43.5
Madras	27.0	30.0	33.1	34.9	33.7	36.1	36.5	37.4	37.9	39.8	34.6
North-West Frontier Province	27.3	23.7	27.6	27.0	26.9	30.2	29.3	32.5	30.8	25.6	28.0
Punjab	41.5	39.3	43.2	40.1	40.1	41.6	42.3	46.3	44.5	43.3	42.2
United Provinces..	34.4	32.2	36.0	34.7	32.7	34.2	36.7	38.2	34.3	37.3	35.1

* Calculated on the population figure of 1921.

SUBSIDIARY TABLE X.

Reported death-rate per mille* during the decade 1921-30 in the main Provinces.

Province.	Number of Deaths (both sexes) per mille in										Average Death-rate per mille during the decade.		
	1921.	1922.	1923.	1924.	1925.	1926.	1927.	1928.	1929.	1930.	Per-sons.	Males.	Females.
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Assam	26.5	26.9	23.5	27.3	22.5	23.0	23.5	22.2	20.9	21.4	23.8	23.9	23.5
Bengal	30.1	25.2	25.5	25.9	24.9	24.7	25.6	25.5	23.5	22.4	25.3	25.7	25.0
Bihar and Orissa ..	32.8	24.1	25.0	29.1	23.7	25.7	25.1	25.3	26.9	29.6	26.7	28.3	25.1
Bombay	26.0	23.6	25.9	27.6	23.7	28.6	25.7	27.3	30.5	29.5	26.8	26.6	27.1
Burma	21.3	22.2	20.9	21.5	18.8	20.9	19.6	21.3	22.1	20.8	20.9	21.5	20.3
Central Provinces and Berar.	44.0	29.3	30.5	32.6	27.3	34.3	31.3	33.7	34.1	37.8	33.5	35.2	31.7
Madras	20.2	21.0	22.2	24.5	24.4	25.6	24.3	26.4	25.3	25.5	23.9	24.6	23.3
North-West Frontier Province.	31.6	21.7	23.7	31.0	19.8	21.8	22.0	19.3	23.7	21.9	23.7	24.0	23.3
Punjab	30.1	22.1	30.9	43.4	30.0	36.5	27.5	24.7	28.8	29.7	30.4	29.3	31.6
United Provinces ..	39.6	25.0	23.4	28.3	24.8	25.1	22.6	24.2	24.3	27.2	26.4	26.9	25.9

* Calculated on the population figure of 1921.

SUBSIDIARY TABLE XI.

Reported deaths from certain diseases per mille in the main Provinces.

Disease.	Actual number of total deaths in										Total.	Average annual rate per mille.
	1921.	1922.	1923.	1924.	1925.	1926.	1927.	1928.	1929.	1930.		
1	2	3	4	5	6	7	8	9	10	11	12	13
ASSAM.												
Fever ..	107,626	112,094	106,347	113, 98	98,015	93,689	89,324	89,255	83,520	89,772	982,840	14·34
Cholera ..	12,829	16,219	3,728	19,182	6,233	10,275	15,392	6,915	7,765	6,332	104,870	1·53
Small-pox ..	2,774	2,610	3,213	1,647	2,745	4,840	5,237	8,461	1,648	1,208	34,383	0·50
BENGAL.												
Fever ..	1,070,368	885,268	909,795	912,408	874,228	822,774	789,006	752,003	713,531	705,066	8,434,447	18·61
Cholera ..	80,547	51,712	41,483	48,514	34,276	59,106	118,377	136,245	81,090	54,963	706,313	1·50
Small-pox ..	8,157	7,864	4,236	5,567	17,436	25,548	42,514	43,558	20,407	11,268	186,555	0·39
Plague ..	59	150	98	35	9	..	1	6	..	..	358	0·01
BIHAR AND ORISSA.												
Fever ..	769,871	578,656	599,840	660,635	557,224	584,444	559,360	564,979	602,038	643,518	6,120,565	18·00
Cholera ..	90,688	26,805	8,198	77,480	17,336	27,268	49,022	77,103	104,034	155,215	633,149	1·81
Small-pox ..	7,836	2,560	3,161	6,932	14,382	34,873	34,661	13,567	6,671	7,455	132,098	0·38
Plague ..	16,504	15,066	28,911	10,792	6,788	8,381	6,112	7,627	8,266	4,105	112,552	0·30
BOMBAY.												
Fever ..	226,100	197,888	196,231	214,563	183,764	222,476	183,543	206,356	246,428	223,274	2,100,623	10·98
Cholera ..	3,521	2,768	9,221	8,236	57	73	26,153	6,881	9,084	15,142	81,136	0·42
Small-pox ..	1,771	1,170	2,811	11,152	5,644	3,922	5,091	5,265	10,635	21,341	68,802	0·36
Plague ..	4,672	8,379	33,741	9,214	12,601	9,866	4,076	13,563	18,014	5,026	119,152	0·62
BURMA.												
Fever ..	82,741	82,884	78,629	75,288	68,685	72,790	75,321	76,815	78,546	83,950	775,649	7·14
Cholera ..	3,791	5,047	1,488	8,083	1,932	6,182	4,528	7,209	7,970	661	46,891	0·43
Small-pox ..	987	1,439	2,846	2,501	3,852	2,339	1,704	2,825	1,841	921	21,255	0·20
Plague ..	4,403	7,282	7,606	5,491	4,064	2,906	3,508	4,933	1,867	1,962	44,022	0·41
CENTRAL PROVINCES AND BERAR.												
Fever ..	327,930	237,164	233,575	240,944	204,667	252,609	224,068	259,109	271,054	287,330	2,538,450	18·24
Cholera ..	58,331	64	1,090	9,704	124	4,565	16,311	12,198	6,168	23,250	131,805	0·95
Small-pox ..	1,787	407	275	978	3,145	3,644	2,809	1,399	1,391	4,954	20,789	0·15
Plague ..	5,467	6,149	15,867	11,081	5,223	6,486	3,368	3,770	2,808	871	61,090	0·44
MADRAS.												
Fever ..	316,019	319,688	318,172	322,356	316,406	337,945	321,995	344,683	339,052	330,496	3,266,812	7·99
Cholera ..	27,064	16,502	5,169	51,971	44,815	24,407	35,334	57,677	25,846	18,746	307,531	0·76
Small-pox ..	9,792	22,801	24,434	18,810	20,478	10,957	7,781	7,618	9,708	8,025	140,404	0·33
Plague ..	11,875	9,193	12,110	3,922	2,014	2,143	2,457	2,106	1,801	1,459	49,080	0·12
PUNJAB.												
Fever ..	423,162	306,654	420,398	452,187	401,775	436,156	358,679	316,235	402,429	422,377	3,940,052	19·20
Cholera ..	19,215	128	11	3,351	3,049	87	11,286	2,034	2,309	1,181	42,651	0·21
Small-pox ..	4,575	1,608	2,140	4,040	7,038	17,595	9,920	8,764	7,763	5,341	68,784	0·34
Plague ..	2,553	7,780	50,086	251,261	37,630	108,287	8,452	8,282	2,053	554	476,938	2·32
UNITED PROVINCES.												
Fever ..	1,361,920	909,293	780,049	947,807	875,594	867,939	786,552	765,954	810,583	942,469	9,048,160	19·94
Cholera ..	149,667	2,330	2,591	67,000	7,653	6,166	28,285	44,941	50,924	61,334	420,891	0·93
Small-pox ..	1,439	242	747	2,724	9,373	12,020	7,894	3,012	11,725	11,071	60,247	0·13
Plague ..	24,009	23,291	74,187	56,210	49,091	57,297	15,570	80,943	37,678	10,860	429,136	0·94

APPENDIX TO CHAPTER I.—By A. E. Porter—*The problem of population growth and an estimate of the future population of Bengal.*

Malthus and
Doubleday.

Starting with the proposition that population is necessarily limited by the means of subsistence there are in the field two principal rival theories of population growth. That deriving from Malthus has been* stated thus: first that population invariably increased where the means of subsistence increased unless prevented by some very powerful and obvious checks; and secondly that these checks which repress the superior power of population and keep its effects on a level with the means of subsistence are all resolvable into moral restraint, vice and misery. In other words nature having arranged for population to increase at a rate at which it is bound to overtake and pass the means of subsistence periodically redresses the balance by famines, epidemics and other calamities unless human intelligence steps in and prevents the excessive increase either by moral restraint or by measures for limiting the birth rate or for despatching the excess of population. The other theory derives from Thomas Doubleday and gives nature a rather less sinister role. It is that when the existence of a species is endangered "a corresponding effort is invariably made by nature for its preservation and continuance by an increase of fertility, and that this especially takes place whenever such danger arises from a diminution of proper nourishment or food, so that consequently the state of depletion or the deplethoric state is favourable to fertility, and that, on the other hand, the plethoric state or the state of repletion, is unfavourable to fertility in the ratio of the intensity of each state". It has been thought that this statement lays too much stress upon food and the position has been thus† restated: "In circumstances of ease the birth-rate tends to fall: in circumstances of hardship the birth-rate tends to rise".

Pell's Law
of Births and
Deaths.

The recorded census figures of population in Bengal probably cover too short a period to offer clear support to either one of these theories against the other. During the last sixty years the population of Bengal has become nearly half as large again as it was in 1872. There can be no question of intelligence checks having operated, and Bengal has been free from major calamities except in the decade before last when the influenza epidemic from which virtually the whole world suffered operated to reduce the rate of increase during the decade to a figure lower than any in its recorded census history. If the Malthusian doctrine holds, Nature is not yet aware of any need to apply a check to the increase of population in Bengal. If the Darwinian theory holds and "fecundity is in direct relation to the chances of death", and if the "law" of Doubleday applies, Nature still finds it necessary to maintain in Bengal a high birth-rate in order to keep pace with the high death-rate. In some points at least the Malthusian theory fails to explain the facts. In European countries and America, where most investigation has been carried out, it has been found‡ (a) that the birth-rate is negatively correlated with wealth and (b) that the indirect psychological and social effect of relative poverty as contrasted with relative wealth express themselves definitely and clearly in the sexual activity of human beings and through sexual activity in birth-rates. On the Malthusian theory in the wealthier classes where the means of subsistence are plentiful the population should increase more rapidly than in the poorer classes where they are less plentiful unless there were some voluntary interference with the rate of birth. The evidence of any such voluntary restriction is not conclusive and the theory generally held is that fertility itself decreases in the higher classes with increasing wealth and culture. The Malthusian doctrine also fails to account for the fact that a high birth-rate and a high death-rate are apparently invariably found together and that conversely where there is a low birth-rate there is also a low death-rate. This fact and the extreme doubtfulness of any evidence to show that conscious limitation of the family can account for the whole or a considerable part of the decrease in the birth-rate where it is low have led to the enunciation of the theory§ that "the net result of the variations of the degree of fertility under the direct action of the environment will bear an inverse proportion to the variations of the capacity for survival." Under this theory variations in the birth-rate are mainly due to the operation of a natural law which adjusts the degree of fertility to suit the death-rate of the race. The theory involves the postulate that the same conditions which lead to a reduction in the death-rate lead also to a decrease in fertility in some manner not yet known. The author of the theory suggests that the hormones assist in regulating the fertility of the germ cells, that the output of hormones by the endocrine glands is regulated by the nervous system which responds to the action of the environment and that the variations in the degree of fertility in response to the direct action of the environment will bear an inverse proportion to the development of nervous energy.

Raymond
Pearl's
Logistic
Curve.

What may be considered to be a development of the second of these two theories is that put forward by ||Raymond Pearl. This theory deduces that populations grow in size according to the same mathematical law that individual animals and plants follow in the growth of their bodies in size, and that human populations grow according to the same law as do experimental populations of lower organisms. The law of growth postulated on these deductions may be expressed by an equation with three constants, and the curve representing this equation is

* E.g., by W. S. Thompson—*Population, A Study in Malthusianism*, 1915.

† By H. Sutherland, see *Proceedings of World Population Conference*, 1927, page 58.

‡ Pearl—*Biology of Population Growth*, 1926.

§ C. E. Pell, *The Law of Births and Deaths*, 1921.

|| R. Pearl, *Studies in Human Biology*, 1924; *The Biology of Population Growth*, 1926.

called by Pearl a "logistic curve". Equations have been worked out and fitted to the populations of fifteen countries of the world, the whole world and the population of certain cities and have been shown to give over the whole recorded census history of each a very reasonable congruity with the recorded facts. Assuming the mathematical form of the curve this theory allows account to be taken of the fact that a population is necessarily confined to a certain area and therefore must have an upper limit of population as well as a lower (which may be nil) and for the fact that population growth takes place in cycles conditioned amongst other factors by cultural achievement. It is possible that over a restricted period the logistic curve may not give so accurate an approximation to the recorded population as a curve of some other form. As a method of predicting future growth also it is liable to the irruption of influences not previously prevalent. Pearl states "predictions of future growth may at any time be altered by the entrance into the situation of new economic or social factors of a different sort to those which have operated during that past period which the equation covers. The population may be stimulated to start upon a new cycle of growth or slighter but still in kind new factors may alter somewhat the upper limiting value of the present cycle". In certain instances however the logistic curve calculated by him gives astonishingly close approximations to the population actually recorded later. For the United States of America in 1930, for instance, a curve worked out before the census of 1920 suggested a population within 5 per 1,000 of that actually enumerated.

Three curves of Pearl's logistic type have been fitted to the census population of Bengal and the population calculated from them is compared with the observed population. The first is the equation worked out by Mr. P. J. Griffiths, I.C.S., and it was hoped to give in an appendix brief notes on the method by which it was calculated. Difficulties in setting up the rather complicated mathematical formulæ involved however have prevented this. Briefly however, the method consists in fitting a curve of the required type to three of the recorded census figures and then adjusting it by successive approximations to all the recorded figures. The desired approximation is one in which the algebraic sum of differences between the calculated and the actually recorded populations is nil and the sum of the squares of these differences is a minimum. Mr. Griffiths' curve was worked out for the population actually recorded in Bengal treating the interval between each census count as being exactly ten years and assuming that a negligible error only was introduced by this treatment and by neglecting to make an adjustment for change of area. For the other two calculations the recorded census population was adjusted to represent the estimated population in the area now constituting Bengal on the 1st March of each census year after 1881 and on the 1st March 1871. In making this calculation it was assumed that the population between any two census years changed at a uniform rate and that the rate of change between March 1871 and the date of the census in 1872 was the same as between 1872 and 1881. In arriving at the third equation allowance has been made for a small factor which Mr. Griffiths has noted as being disregarded in his calculation. The equations give a curve of reasonable fit and the last shown is the most accurate approximation for the observations in so far as the algebraic sum and the sum of squares of differences between the observed and calculated population at all census years from 1881 to 1931 is less with this equation than with the other two, whilst for all years including 1871 the sum of the differences is least and the sum of their squares not indeed least but very near to it.

The logistic curve applied to Bengal.

On the first equation the rate of increase was being successively enhanced till 1881 when it began to decline and the maximum population would be about 74 millions, which would be practically attained in 2063 A. D. On the third equation the point of maximum increase was passed in 1872, the rate of growth is also diminishing and a maximum population of about 68½ millions would be expected which would be approximately reached in 2076 A. D. On neither equation is any lower limits of population implied, i.e., the equations do not suggest that the present cycle of population growth began at any definite period, although on the third equation Bengal should have had a population of not less than two millions in 1668 A. D.

General tendencies of population growth and upper limit of population suggested.

Mr. Griffiths also fitted curves to the population of Muslims and Hindus The correspondence of these figures, particularly for Hindus, is not so close as is obtained by the equation for the total population, but the Muslim equation gives a reasonable fit for the years 1881 to 1921. The total maximum population towards which the equations suggest that each community is tending would be for Muslims about 32 millions and for Hindus about 23¾ millions: in aggregate these figures fall short by 14 to 20 millions of the upper asymptotic population calculated for all communities. The Muslim and Hindu equations imply that the point at which the rate of increase ceased to be successively greater than in previous decades was passed in about 1886 by the Muslims and 1812 by the Hindus who are now approaching a stationary population. In any case the implication is that the Hindu community is further along its present growth cycle than the Muslim: in other words that it is approaching its maximum whilst by comparison the Muslim community is still rapidly growing. It is possible to find a suggested explanation, if this is actually true, in the fact that Muslims live mainly in the healthier regions of Eastern Bengal and Hindus in the less healthy and less progressive portions of West Bengal: but it would be interesting if similar calculations have been made, to know whether the implication arises also in the case of other provinces.

The logistic curve applied to the Muslim and Hindu population.

Estimate of
population
in 1941.

The equations for total populations suggest a population of between 53 and 53½ millions in 1941. The communal equations appear (and Mr. Griffiths holds them) to be inappropriate. Equations of a more complicated form might give closer correspondence with the observed census figures, but the calculation involves very great labour, they might give no better estimates for the future and in any case they are scarcely worth making in view of the fact that only seven counts are on record. For the future all that can be said is that if the type of equation used is applicable to population growth and if the conditions influencing population growth in Bengal over the period to which it has been applied continue substantially unchanged for the future, the estimates of total population made by use of the equations deduced should represent the population to be expected. The equation themselves suffer however by being fitted to so few observed counts and the conditions influencing population growth cannot be predicted and are difficult to discover if a change in the cycle suggests their existence. Thus after the formation of the German Empire and the institution of the present constitutions in Japan, Pearl found that the cycle of growth was, as it were, speeded up and Germany and Japan starting from the population of that critical time took a leap forward and continued their cycle as if they had been at an earlier stage when growth was more rapid. It is by no means impossible that constitutional change may have a similar effect in Bengal and may affect the different communities to a different degree.

Can Bengal
support a
larger
population.

The prospect or even the possibility of so considerable an increase in a population already one of the densest in the world may lead to apprehension that the population of Bengal is rapidly approaching numbers which cannot be sustained at any reasonable standard of living upon the means of subsistence which Bengal can produce for long. If population actually does increase according to some such law as that illustrated by the logistic curve the fact that considerable increases are inevitable makes the apprehension futile. Pearl himself has pointed out that this inevitable increase need not necessarily increase the misery in the world since first this result has not happened up to the present, secondly "the orderly evolution of human knowledge justifies us in assuming that science will keep pace in discovering means of expanding opportunities of happy human subsistence", and thirdly the human organism is itself adaptable to an extent not yet imagined. It cannot be denied that a large part of the population of Bengal lives at a very low level of subsistence, and that any increase of population must lead to increased distress unless the potentialities of the province are developed. What is suggested here is that these potentialities are such that pessimism as to the future condition of its population if considerable increase take place is not necessarily justified. Like the rest of India Bengal is notable for its undeveloped resources and the inefficiency with which such resources as it has are exploited. The soil is probably unlikely to deteriorate further and the general opinion about areas such as Bengal, where scanty manuring necessitates small crops, is that a dead level of yield was reached long ago and is conditioned by the rate at which plant food constituents are made available by weathering. The cultivator in Bengal practically never enriches the soil with any manure and the use of manures together with an improvement in the implements of agriculture which would then be rendered possible would probably increase enormously the output of the soil. It has been* estimated that improved methods would result in a reasonable expectation of increased food output of 30 per cent. throughout the whole of India. There is no doubt that any additional labour required under a more intensive form of cultivation could easily be obtained since the agriculturist in Bengal on the whole probably works less than agriculturists in almost any other part of the world. Subsidiary Table I [Bengal Report] also shows that of the total area cultivable only 67 per cent. is now actually under cultivation. If the total cultivable area were brought under cultivation and if improved methods of cultivation yielding an increase of 30 per cent. over the present yield were adopted it is clear from a simple rule of three calculation† that Bengal could support at its present standard of living a population very nearly twice as large as that recorded in 1931. Fresh areas in course of time will be brought under cultivation as lands on the Bay of Bengal accrete and reach a stage suitable for cultivation. Even at present it is clear that by far the majority of the food stuffs consumed in Bengal are locally produced. During 1930-31, taking only grains, pulses and flour, salt, sugar and spices, provisions and oilman's stores Bengal imported goods of the value of Rs. 821 lakhs and exported goods of the value of Rs. 281 lakhs. But the balance of trade during the same year amounted to Rs. 34,52·41 lakhs or more than three times the aggregate export and import trade. The sea-borne trade of Calcutta is not confined to goods originating in or meant exclusively for Bengal, but in the year 1930-1931 jute, tea and hides contributed 77½ per cent. of the total and Bengal contributed all the jutes, nearly all the hides and a very considerable part of the tea. It is consequently clear that the favourable balance of trade to a very small extent only was dissipated outside Bengal and that the balance itself provides sufficiently for an enormously increased importation of food stuffs were it necessary to import them at any time. Not only agriculture but also industry is at present in Bengal practically in its infancy. Reviewing production in India a Bengali writer‡ in 1924 came to the conclusion that the "outstanding feature of the productive system of India

* G. Clarke, *Proceedings of the XVIIIth Indian Science Conference.*

† $\frac{100}{67} \times 138 = 194.$

‡ Rajani Kanta Das, *Production in India.*

is its inefficiency which is shown by the great wastage of resources on the one hand and the lower productivity of the industries on the other.... It is insufficient production to which is due India's poverty, both absolute and relative.... The lack of capital is partly responsible for the present low productivity....but.... could not be regarded as the fundamental cause of insufficient production in India..... Insufficient production is the result of inefficient labour, i.e., lack of capacity on the part of the people to mobilise the physical, intellectual and moral forces of the country and to organise land and capital effectively for national production". Improvement in methods of production both agricultural and industrial should therefore very easily make possible the subsistence of such an increased population as is suggested by the figures already discussed, and the considerations deduced in this paragraph also make it possible to hope that such an increase of population may be attended with a very considerable increase in the material condition of the people and in the standard of living. It is clear at least that it is not yet time to indulge in gloomy forebodings on the ground that Bengal is over-populated, provided full use is made of the available resources of the country by improved methods.

A final problem suggested by the growth of population in Bengal concerns the enormous wastage of life with which that growth is achieved. It is clear that what is of importance in population growth is the rate of increment. A high rate of increment can be achieved by a relatively low birth-rate if the death-rate is also low, whilst on the contrary a comparatively low rate of increase results from even a high birth-rate if the death-rate also is high. actually both the birth-rate and the death-rate in Bengal are very high and there is consequently an appalling wastage of reproductive energy in maintaining the present increase of population. If the logistic theory of population growth is correct a retarded rate of increase is inevitable at the upper stages of the cycle of growth until finally a population is reached which to all intents and purposes is stationary. France in Europe where there is a notoriously low birth-rate probably illustrates this position best but an exhaustive* enquiry into the Arab population of Algiers suggested to Pearl that the retardation of the rate of increase is in general effected at the upper stages of the population growth by decrease both in the birth-rate and in the death-rate. The Arab population of Algiers showed both a decrease in the birth-rate which could not be ascribed to any voluntary measures and a decrease in the death-rate which equally could not be ascribed to improvement in public health measures since the traditional custom of the Arabs offer the utmost possible resistance to any changes in their habits which would improve sanitary conditions. Attempts to effect a retardation of the rate of increase by voluntary limitation of the birth-rate are almost certainly doomed to failure particularly in Bengal. They are repugnant to common sentiment in this country, the methods adopted are so expensive as to be beyond the reach of the great majority of the inhabitants and it is probably true to say that there are as yet none which can be relied upon as being absolutely certain and satisfactory. Figures for the different strata of society show that there is no evidence to believe that contraceptive measures are used by the upper classes or those engaged in professions and the liberal arts ; and it is certain that they are not practised at all in the lower strata of society. What appears to happen, if the analogy of Western Europe may be accepted, is that a decrease in the death-rate is inevitably followed at some period by a corresponding decrease in the birth-rate. It is clear also that fertility in western countries decreases with the increase of wealth and intellectual interests. It is therefore possible to expect that a reduction of the birth-rate by the adoption of improved measures of public health accompanied by an improvement in the standard of living, an increase in the spread of education and perhaps principally by a further emancipation of women and their introduction to spheres of usefulness and activity from which they are now in Bengal generally debarred by social custom and by the institution of purdah will in due course result in a decrease in the birth-rate corresponding with the decrease in the death-rate which it is the object of public health measures to bring about.

Extravagant methods of population increase are a practical problem.

* *Biology of Population Growth.*

CHAPTER II.

Urban and Rural.

Statistics
of Urban
and Rural
Population.

36. The statistics of the urban population are to be found in Imperial Tables I, III, IV and V. Table I gives the territorial distribution of towns and villages and the figures of occupied houses and of the population separately for towns and villages ; Table III shows the population as distributed between villages and towns of different sizes ; Table IV gives the population of towns with the variations for fifty years, and Table V their territorial distribution and their composition by communities of different religions. The floating population which cannot definitely be allotted either to the urban or to the rural totals, that is to say persons enumerated in railway trains, boats or temporary encampments, will be found separately in Table III, and is so small (0·14%) compared to the whole population dealt with that it can be ignored in any consideration of the comparative figures. The total percentage of the population censused as urban was only 11%, showing an increase in its proportion to the whole of 0·8% since 1921. That is to say 6,510,151 or 19·2% of the total increase of the population during the past decade has taken place in towns. This increase is of course partly the natural increase of the pre-existing urban population and partly occasioned by migration from rural areas or by their incorporation into urban ones, while in estimating the growth of the urban population allowance must be made for the expansion of large villages to a size or importance which causes them to be classified as towns, and likewise for the omission of dwindling communities which fall out and are reclassified as rural. The tables therefore which deal with the changes in the urban population do not adhere to the population of the identical sites shown in the corresponding tables of former decades but give the total population enumerated in urban areas at the time of the census, as compared with the similar population ten years previously, the differences due to changing classification as urban or rural being shown in a supplementary table to Table IV. The accompanying table shows the variation in urban and rural populations respectively, and the very small proportion that the urban population bears to the whole is clearly indicated by the close relation between the variation in total population and that of the rural population as contrasted with the general antithesis between the total and the urban variations.

Province.						Variation 1921—31. Increase (+) Decrease (—) Per cent.	Variation in Urban Per cent.	Variation in Rural Per cent.
India	..	..	..	..	..	+10·6	+20·0	+9·6
Provinces	..	..	..	..	..	+10·0	+18·4	+9·0
1. Ajmer-Merwara	..	..	..	..	..	+13·1	+9·4	+15·0
2. Andamans and Nicobars	..	..	..	..	..	+8·8	..	+8·8
3. Assam	..	..	..	..	..	+15·7	+15·8	+15·2
4. Baluchistan	..	..	..	..	..	+10·2	+31·6	+5·9
5. Bengal	..	..	..	..	..	+7·3	+15·6	+6·7
6. Bihar and Orissa	..	..	..	..	..	+10·8	+20·3	+10·4
7. Bombay	..	..	..	..	..	+13·3	+11·6	+13·9
8. Burma	..	..	..	..	..	+11·0	+17·7	+10·3
9. Central Provinces and Berar	..	..	..	..	..	+11·5	+20·2	+10·4
10. Coorg	..	..	..	..	..	—0·3	+11·2	—1·0
11. Delhi	..	..	..	..	..	+30·3	+47·0	+2·7
12. Madras	..	..	..	..	..	+10·4	+20·1	+9·1
13. North-West Frontier Province	..	..	..	..	..	+7·7	+15·0	+6·4
14. Punjab	..	..	..	..	..	+14·0	+38·7	+11·0
15. United Provinces of Agra and Oudh	..	..	..	..	..	+6·7	+12·9	+5·9
States and Agencies	..	..	..	..	..	+12·8	+25·5	+11·6
16. Assam States	..	..	..	..	..	+17·8	+17·3	+21·7
17. Baluchistan States	..	..	..	..	..	+6·9	+16·0	+6·7
18. Baroda State	..	..	..	..	..	+14·9	+18·6	+13·9
19. Bengal States	..	..	..	..	..	+8·5	+10·4	+8·5
20. Bihar and Orissa States	..	..	..	..	..	+17·5	+29·5	+17·4
21. Bombay States	..	..	..	..	..	+15·5	+24·3	+14·3
22. Central India Agency	..	..	..	..	..	+10·5	+23·0	+9·3

Province.				Variation 1921—31. Increase (+) Decrease (—) Per cent.	Variation in Urban Per cent.	Variation in Rural Per cent.
23. Central Province States .. .. .	..	..	..	+20.1	+55.9	+19.3
24. Gwalior State .. .. .	..	..	..	+10.3	+28.2	+8.7
25. Hyderabad State .. .. .	..	..	..	+15.8	+36.2	+13.6
26. Jammu and Kashmir State .. .. .	..	..	..	+9.8	+17.4	+9.1
27. Madras States Agency .. .. .	..	..	..	+23.7	+50.1	+20.7
<i>Cochin State</i> .. .. .	..	..	..	+23.1	+62.3	+17.2
<i>Travancore State</i> .. .. .	..	..	..	+27.2	+36.4	+26.2
<i>Other Madras States</i> .. .. .	..	..	..	—4.6	+201.1	—20.0
28. Mysore State .. .. .	..	..	..	+9.7	+21.1	+7.7
29. N. W. F. P. (<i>Agencies and Tribal Areas</i>) .. .. .	..	..	..	—20.0	..	—20.0
30. Punjab States .. .. .	..	..	..	+7.3	—6.6	+7.8
31. Punjab States Agency .. .. .	..	..	..	+11.6	+19.1	+10.8
32. Rajputana Agency .. .. .	..	..	..	+14.2	+18.1	+13.4
33. Sikkim State .. .. .	..	..	..	+34.4	..	+34.4
34. United Provinces States .. .. .	..	..	..	+6.3	+9.8	+5.9
35. W. I. States Agency .. .. .	..	..	..	+12.9	+21.4	+10.7

37. Of a necessity the definition of a town for census purposes has resulted in a distinction which is sometimes arbitrary. Towns of not less than 100,000 inhabitants were to be treated as cities, and also any other towns which the Superintendent decided to treat as cities subject to the sanction of the Local Government. But the Census Code further provided for the treatment as a town of every municipality, all civil lines not included in municipal limits, every cantonment and every other continuous collection of houses, inhabited by not less than 5,000 persons, which the Superintendent of Provincial Census Operations decided to treat as urban. In making this decision the Census Superintendent was instructed to take into consideration the character of the population, the relative density of the dwellings, importance in trade and historic associations, and to avoid treating as towns overgrown villages without urban characteristics. The effect of the latter provision is to be inferred from the marginal statement which shows that of

Definition
of Urban
Areas.

	Number.		Population.		Percentage of total urban population.		a total of 2,575 places treated as towns in 1931 600, or 23.3%, were places so classified by the Superin- tendent of Census Opera- tions as (the quotation is from the
	1921.	1931.	1921.	1931.	1921.	1931.	
Total Towns	2,316	2,575	32,475,276	38,985,427	100	100	
Municipalities, Civil Lines, Notified Areas, Cantonments, etc.	1,276	1,975	25,453,745	34,863,339	78	89	
Towns arbitrarily classified as such for census purposes	1,040	600	7,021,531	4,122,088	22	11	

Jammu and Kashmir State Census Code) "bearing the cachet of urbanity", although not covered by the standard definition and therefore not possessing any urban self-government. On the other hand their inhabitants amount to only 4,122,088, or 10.6 % of the urban population, which indicates the comparatively small size of these towns. There has been inevitably considerable variation in the latitude observed by census superintendents in the exercise of this discretionary power of classification, with the result that the varying degrees of urbanization of different provinces cannot necessarily be taken at their face value. Thus Mysore appears as having a higher proportion of urban population than Madras, but 66 of its 108 towns have a population of less than 5,000, and if such towns be omitted altogether the position of the two units is reversed. Similarly both Bombay and the United Provinces have large proportions of their total urban population represented by the inhabitants of small towns of 5,000 inhabitants or less. In this connection it will be well to bear in mind that the distinction between a small town and a large village as far as the conditions of life or occupation of its inhabitants is concerned is often meaningless, and the treatment of any place as urban rather than rural does not necessarily imply any degree of industrialization and only the minimum degree of a corporate life distinct from that of the ordinary

village ; to quote the Census Superintendent for Bengal “ many of the non-industrial towns.....differ but little in their conditions from large villages, except in the provision.....of an infrequent lamppost”. A comparison with the figures of last census gives some indication of the spread of local self-government.

The greatest degree of growth has been in the number of towns with a population of from 20,000 to 50,000, the total population of which is now nearly double that of towns of 50,000 to 100,000 and not very much short of that of the 38 towns whose individual populations exceed 100,000. The number of towns has been increased at this census by the treatment of cantonments as separate entities instead of including their figures with that of an adjoining town. Such inclusion may be justified in the case of suburbs, civil lines and notified areas which are more or less dependent for their existence on the proximity of a town, but a cantonment may be and frequently is not only of entirely independent origin and a self-contained unit, but actually indebted to the absence of a large urban population for the site chosen for occupation. Moreover even where it adjoins an old established urban area, the cantonment has a separate organisation and a corporate life of its own. Out of eighty-nine cantonments thirty-four have an elected board and thirteen a nominated board, the administration of the remainder being vested in a corporation sole. All of these bodies have an executive officer usually provided in the case of the more important ones by the Cantonment Department. In any case the cantonment depends for its individual and separate existence on causes which are foreign to those governing the growth or decline of cities and towns, and it is

therefore desirable to separate the population from that of the urban areas which they so often adjoin. This separation of cantonments has sometimes affected the classification of the town with which it was formerly combined. The figures in the margin indicate how little change there has been in the size of towns during the decade and in urbanization generally.

Class and description of town.	No. of towns in class.		Total population in towns of the class.	
	1921.	1931.	1921.	1931.
I. 100,000 and over ..	35	38	8,211,704	9,674,032
II. 50,000 to 100,000 ..	54	65	3,517,749	4,572,113
III. 20,000 to 50,000 ..	200	268	5,968,794	8,091,288
IV. 10,000 to 20,000 ..	451	543	6,220,889	7,449,402
V. 5,000 to 10,000 ..	885	987	6,223,011	6,992,832
VI. Under 5,000 ..	691	674	2,333,129	2,205,760

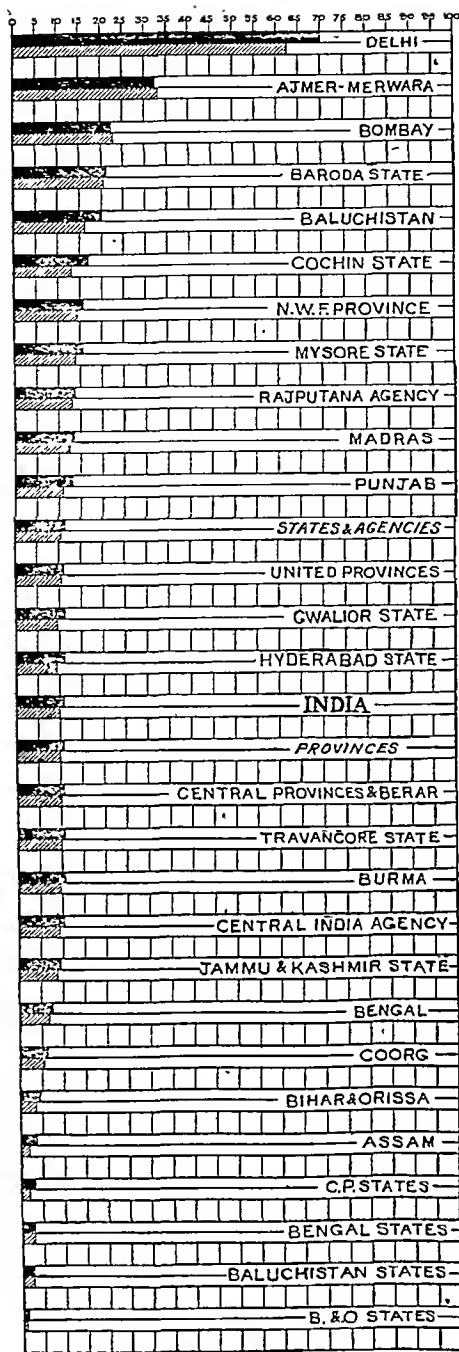
Urban
Population.

38. The total urban population of India according to the above methods of classification comes to 38,985,427 or 11% of the total population. The distribution of the population between villages and towns is given in subsidiary table I to this chapter, the percentage of the population which is urban ranging from 3·4% of the whole population in Assam to 22·6% in Bombay. Compared to this latter, the most urbanized of the major provinces of India, the proportion of the population classified as urban is 49% in France, 50·8% in Northern Ireland, 53·7% in Canada, 56·2% in the U. S. A. and 80% in England and Wales.

(Distribution of Population in groups of Towns according to size and in Rural Areas, 1891 to 1931.

Class of Places.	1931.		1921.		Per mille of total Population.				
	Places.	Population.	Places.	Population.	1931.	1921.	1911.	1901.	1891.
1	2	3	4	5	6	7	8	9	10
Total Population ..	699,406	352,837,778	687,981	318,942,480	1,000	1,000	1,000	1,000	1,000
Urban Areas ..	2,576	38,985,427	2,316	32,475,276	110	102	94	99	95
Towns having—									
I—100,000 and over ..	38	9,674,032	35	8,211,704	27	26	22	22	22
II—50,000 to 100,000 ..	65	4,572,113	54	3,517,749	13	11	9	12	11
III—20,000 to 50,000 ..	268	8,091,288	200	5,968,794	23	19	18	17	16
IV—10,000 to 20,000 ..	543	7,449,402	451	6,220,889	21	19	20	22	19
V—5,000 to 10,000 ..	987	6,992,832	885	6,223,011	20	20	19	20	21
VI—Under 5,000 ..	674	2,205,760	691	2,333,129	6	7	6	6	6
Rural Areas ..	696,831	313,852,351	685,665	286,467,204	890	898	906	901	905

For reasons of economy in sorting, the available figures of internal migration are less detailed than in 1921, but the returns for twelve cities show that, out of a total population of 3,670,261, as many as 1,746,211 (1,155,543 males and 590,668 females) or 48% of the total population, were born elsewhere, the remainder being the natives of their respective cities. This, of course, does not represent the actual



URBAN 1931 1921

mature age in cities and towns which is illustrated by the figures in Table I for urban and rural population, where the number of females to every 1,000 males is 815 in urban areas, and 957 in rural as compared to 941 for India as a whole. Similarly the mean age for Calcutta males is 25·8 and that for Bombay males 25·6,

Province (British) or State.	Females per 1,000 males, total popula- tion.	Females per 1,000 males, urban popula- tion.
Madras	1,025	993
Bihar and Orissa	1,005	820
Central Provinces and Berar	998	886
Western India States	974	995
Hyderabad State	959	932
Burma	958	681
Central India	948	864
Bengal	924	601
Rajputana	908	913
United Provinces	902	805
Bombay	901	773
Assam	900	577
Ajmer-Merwara	892	823
North West Frontier Province	843	642
Punjab	831	699

Urban Sex
Proportions.

accretion from countries or towns, but indicates the maximum extent to which the population of urban areas is reinforced by immigration as distinct from natural increase. It is, of course, obvious that the composition of the truly urban population is likely to differ from that of the rural population of the surrounding area. It is in the nature of things that the more varied activities of towns should attract a mixed population with less homogeneity than that of the country-side. But beyond this, there appears to be a tendency for the population of towns in general to show different characteristics from those of rural areas in certain definite directions. It is naturally to be expected that the percentage of literacy should be greater in towns, where opportunities for education are more readily available, and accordingly we find that 10% of the total literate population, and 29% of the total literate in English, is to be found in 38 cities, and the ratio of literacy to the total population is 27% in these 38 cities as against 8% in India as a whole. Figures for towns other than cities are not available but would probably much increase the ratio if they were. The corresponding percentages for literacy in English are 10·3 and 1·0%. In the case of infirmities, no separate figures for cities are available but the figures for Bengal go to indicate that those infirmities to record which an attempt is made at the Census are not worse in cities than elsewhere, since the number of insane, for instance, returned from the Rajshahi Division was 6,142 as against 4,245 returned from the Presidency Division. Census figures for infirmities are, however, notoriously unreliable and it is not safe to draw any conclusions.

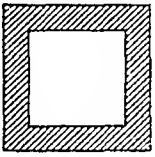
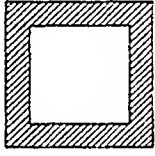
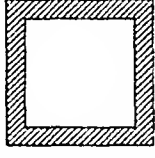
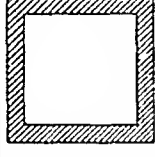
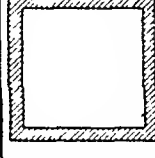
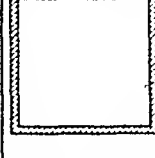
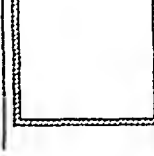
39. The figures for sex and age in cities have to be considered in the light of the common practice in India by which men leave their families in their homes in villages and go to earn their living as temporary or semi-permanent workers in towns. This naturally results in an excess of males of mature age in cities and towns which is illustrated by the figures in Table I for urban and rural population, where the number of females to every 1,000 males is 815 in urban areas, and 957 in rural as compared to 941 for India as a whole. Similarly the mean age for Calcutta males is 25·8 and that for Bombay males 25·6, years as compared with 23·2 the mean age for males in India, as a whole. This condition does not however apply to the whole of India, as in Rajputana the towns have 913 females per 1,000 males compared to 907 in rural areas*. These towns are not, of course, industrial. The marginal tables show (1) the number of females in the urban population per 1,000 males for each of the main provinces, and (2) for some of the principal cities, not only the number of females per 1,000 males but also the number of married females per 1,000 married males, indicating very

* For a possible explanation see para. 78.

Sixteen largest cities in order of population.

City (including cantonment).	Females per 1,000 males.	Married females per 1,000 married males.	City (including cantonment).	Females per 1,000 males.	Married females per 1,000 married males.
Calcutta	468	365	Amritsar	666	756
Bombay	554	499	Lucknow	722	738
Madras	897	936	Karachi	688	679
Hyderabad	886	822	Howrah	550	447
Lahore	565	646	Cawnpore	694	731
Rangoon	477	360	Nagpur	848	838
Delhi	694	754	Agra	799	865
Ahmadabad	717	..	Benares	792	776

the provinces with those of 1921 indicates that there is nearly everywhere a considerable decrease from the 1921 ratio. The only provinces or states in which the urban female ratio shows an increase are Burma, the North West Frontier Province, Baluchistan, Travancore and Cochin, while, excepting Burma, the decrease in the major provinces has been heavy. On the other hand Bombay

City.	Population (including suburbs, cantts., etc.)	Whole rectangle: males; blank area inside: females.	Females per 1,000 males.
Rangoon ..	400,415		477
Calcutta (with Howrah).	1,485,582		490
Bombay ..	1,161,383		554
Lahore ..	429,747		565
Delhi ..	447,442		670
Hyderabad (Deccan).	466,804		886
Madras ..	647,230		807

City which had 664 females to every 1,000 males in 1881, 586 in 1891, 617 in 1901, when the impermanent population was depleted on account of the plague, 530 in 1911 and 525 in 1921 had 554 in 1931, showing a fair increase, probably due however, as in 1901, to depletion of floating male labour, this time on account of the depression in trade. In the accompanying diagram the figures represent the total figures, including suburbs omitted in the table preceding it. In the more purely industrial towns such as those of Gujarat the ratio is much less unequal than in the cosmopolitan ports. It might be expected that decaying towns would show a rising female ratio, since such a town not only fails to attract immigrants but might be presumed to tend towards sending out male emigrants to earn an industrial living by some urban occupation elsewhere. The Census Superintendent of Bengal however has shown that the decaying towns of that province have a falling female ratio, a phenomenon often to be associated with a decline in population in other parts of the world, but not apparently in India generally. In the case of cities which include cantonments allowance must obviously be made for the fact that a disparity in the numbers of the sexes is a necessary concomitant of the concentration of troops. In the main India tables however, that is in Tables III, IV and V, cantonments have been separately shown and are not included in the figures for cities, though in the special tables for cities from Table VI onwards cantonments, etc., are generally included.

40. It was suggested in the Census Report for 1901 that there were possible connections between race and religion and the practice of congregating in towns.

One of the reasons given for the comparative absence of the urban habit in Bengal was the presumption that its population contained a strong mongoloid element, and it was pointed out that the inhabitants of Assam and Burma, both much more mongoloid than Bengal, were even more markedly rural. It may, however, be questioned whether race has in this case anything to do with the matter, and we should be inclined to account for the phenomenon not by race but by rainfall. The areas of the greatest precipitation in the peninsula are the Malabar Coast, Bengal, Assam and Lower Burma, and if living in cities is unpopular, as it certainly is, in these regions it is perhaps rather on account of the greater degree of discomfort which it involves than on account of the racial composition of the people. The population in at any rate two of these areas has an excessively high density, and one which easily compares with that of drier provinces of greater urbanization; on the other hand it is spread, where it is thickest, through almost contiguous but rural habitations among coconut groves and rice fields. In northern India it is not impossible to live in a walled village or town and to move about freely on the face of the land during the greater part if not all of the year. In Eastern Bengal or Cochin the heavens are overcast and the land is awash for nearly half the year, and man or beast can only roam in or on the face of the waters, a condition which makes sanitation and evaporation very much more difficult to obtain in closely agglomerated habitations than in scattered homes each in its own demesne. On the other hand in southern India the Tamil as distinct from the Telugu, Kanarese or Malayali does appear to be predisposed towards urban life.

It was further observed in 1901, though no explanation was suggested, that towns attracted population of different religions in varying degrees, and it was pointed out that whereas in Bengal, Baluchistan, Assam and the Punjab the Muslim took less readily to town life than the Hindu, the case was reversed in most other parts of India, particularly in the United Provinces, the Central Provinces and Berar, in Hyderabad, Madras, Mysore and Rajputana. Clearly the reason has nothing to do with religion. Probably it is to be traced to historical causes, and it would appear, as might perhaps be expected, that the intrusive population is that which tends to prevail in the towns. Thus in Rajputana, Bombay, the Central and the United Provinces, and in southern India generally Hindus represent the country stock established before Islam appeared, and it is natural to find that on the land the Hindu still predominates. Conversely in Baluchistan and the North-West Frontier Province the Hindu is nowadays intrusive and we find that he tends there to congregate in cities. In the case of Burma both are intrusive, but the Muslim has shown a greater tendency to intermarry with the Burman and to settle locally, while many of the Muslims of Burma (Zerbadis and Yakaing Kalas) are more Burmese than foreign in descent. Consequently we find that the Muslim in Burma shows a greater tendency than the Hindu to leave the towns. The two provinces which at first sight appear to spoil this hypothesis are Bengal and the Punjab. Here, however, the inversion of the usual condition would seem to be due not to a breach of the rule that the intruder clings to the towns but to the fact that the country dwellers have been converted on a much larger scale than elsewhere. The Muslim of East Bengal and of the Surma Valley in Assam seems to be descended for the most part from converted inhabitants, and similarly conversion to Islam was probably imposed on the Punjab with more persistence and efficacy than in parts of India more remote from the course of Muslim invasions and added later to the Mogul dominions. Apart from this the trading classes, which are often racial or religious, naturally tend to be town dwellers, so that Parsis and Jews can hardly be found elsewhere, and Jains, who include large numbers of the Marwari and Kathiawari traders, are more urban than communities of other faiths. Thus too Sikhs who are rural at home are town dwellers elsewhere, whither they go generally as mechanics or artificers of some kind. It remains to be added that the figures of some urban communities in the Punjab may have been slightly affected by intensive propaganda aimed at bringing rustics into the towns on census night to swell if possible the numbers of one electoral community or another, and one or two similar cases occurred in the United Provinces. Where this is alleged to have taken place, however, there seems to have been little or no change in the proportions borne by the community to another.

41. The table below gives a summary of certain information with regard to cities, that is with regard to those which have not less than 100,000 inhabitants. Their figure is moderate enough when compared with those of the west. The United

Cities.

Kingdom alone is unfortunate enough to have 56 towns of over this minimum compared to India's 39, while the United States of America have at least 70, though their population is only 123 million, little more than a third of India's. The figures given in column 7 are not all strictly comparable one with another, as the definition of 'foreign born' adopted by different provinces varies. Thus in Calcutta the figure refers to those born outside Bengal, in Hyderabad and Lahore to those born outside the City but in Srinagar to those born outside the State, and in the case of eight other towns to born outside the District.

City.	Total Population.	Density.	Females per 1,000 males.	Literates per 1,000.		Numbers foreign born per 1,000.	Percentage Variation.					
				Males. 5	Fema- les. 6		1881 to 1801.	1801 to 1901.	1901 to 1911.	1911 to 1921.	1921 to 1931.	1881 to 1931.
							8	9	10	11	12	13
1	2	3	4	5	6	7	8	9	10	11	12	13
1. Calcutta with Howrah ..	1,485,582	24,354	489	430	260	328||	+12·5	+22·0	+11·0	+4·3	+11·9	+79·2
2. Bombay	1,161,383	48,000	534	291	153	754	+0·3	-5·6	+26·2	+20·0	-1·2	+50·2
3. Madras	647,230	22,249	897	433	170	348	+11·5	+12·6	+1·8	+1·6	+22·8	+59·1
4. Hyderabad with Secunderabad, etc.	466,894	8,809	889	449	118	321	+13·0	+8·0	+12·0	-19·0	+16·0	+27·0
5. Delhi with New Delhi, Shahdara, etc.	447,442	6,835	670	246†	89†	483†	+11·1	+8·3	+11·6	+30·7	47·0	+158·1
6. Lahore	429,747	10,913	565	297	124	513	+12·4	+14·8	+12·7	+23·2	+52·5	+187·7
7. Rangoon	400,415	16,146	477	512	370	351	+34·4	+30·3	+24·0	+16·6	+17·1	+198·4
8. Ahmadabad	313,789	*	853	*	*	*	+16·3	+25·3	+16·6	+26·4	+14·5	+145·9
9. Bangalore with Civil and Military Station.	306,470	11,709	902	405	168	343§	+15·7	-11·8	+19·1	+25·3	+29·0	+06·6
10. Lucknow	274,659	13,272	745	253	43	320	+4·4	-3·3	-1·6	-4·6	+14·2	+8·2
11. Amritsar	264,840	24,844	666	205	69	203	-10·0	+18·8	-6·0	+4·9	+05·3	+74·4
12. Karachi	263,565	6,720	638	286	114	520§	+43·0	+10·9	+30·2	+42·8	+21·5	+258·3
13. Poona	250,187	6,400	811	408	149	363**	+25·8	-4·5	+5·3	+23·9	+10·5	+82·6
14. Cawnpore	243,755	24,756	696	233	62	473	+24·9	+4·5	-12·0	+21·2	+12·6	+56·9
15. Agra	229,764	12,440	813	214	52	306	+5·3	+11·5	-1·4	+0·0	+23·8	+43·4
16. Nagpur	215,165	10,578	348	308	05	302	+10·0	+0·0	-21·0	+43·0	+48·0	+119·6
17. Benares	205,315	25,045	802	300	83	171	+2·2	-4·6	-4·4	-2·6	+3·5	-0·1
18. Allahabad	183,014	12,118	776	347	133	217	+0·4	-1·8	-0·2	-8·4	+17·0	+14·0
19. Madras	182,018	22,555	085	444	94	185	+18·5	+21·2	+26·6	+2·8	+31·0	+140·6
20. Srinagar	173,573	15,779	831	174	14	24§	..	+3·1	+3·0	+12·2	+22·5	+46·0¶
21. Patna	159,090	10,646	731	305	86	193	-3·2	-18·4	+1·0	-11·0	+33·1	-6·42
22. Mandalay	147,032	5,017	905	704†	390†	100§	..	-2·6	-24·8	+7·7	-0·7	-21·7¶
23. Sholapur	144,654	*	885	254†	48†	313†§	+3·4	+21·6	-18·5	+94·9	+21·0	+141·5
24. Jaipur	144,170	48,060	850	218	32	45	+11·4	+0·0	-14·4	-12·3	+19·9	+1·1
25. Bareilly	144,031	17,652	842	227	62	178	+6·7	+8·4	-2·8	-0·0	+11·3	+25·1
26. Trichinopoly	142,843	17,657	957	485	152	217	+7·3	+15·6	+17·0	-2·5	+18·6	+69·1
27. Dacca	138,518	23,086	745	444	261	75||	+4·1	+10·0	+21·0	+10·0	+16·0	+76·8
28. Meerut	136,709	18,740	750	266	108	267	+19·9	-1·1	-1·6	+5·1	+11·5	+36·8
29. Indore	127,327	14,147	734	318	93	057	..	+4·5	-48·2	+107·1	+36·8	+53·4¶
30. Jubbulpore	124,382	7,807	796	357	109	309§	+11·0	+7·0	+11·0	+8·0	+14·0	+64·0
31. Peshawar	121,866	13,801	607	235†	67†	154†	+5·3	+13·0	+2·0	+6·7	+16·7	+52·4
32. Ajmer	119,524	7,031	811	322	05	435	+41·3	+7·3	+16·8	+31·7	+5·3	+145·2
33. Multan	110,457	0,084	754	200	33	363	+8·6	+17·2	+13·6	-14·5	+40·9	+73·0
34. Rawalpindi	110,284	0,527	570	326	64	617	+39·3	+18·8	-1·4	+16·9	+17·0	+125·2
35. Raroda	112,860	10,064	799	496	184	533	+0·3	-10·8	-4·3	-4·7	+10·2	+6·0
36. Moradabad	110,562	29,020	802	205	75	137	+5·1	+3·0	+8·0	+1·0	+33·7	+50·5
37. Tinnevely with Palamcottah	109,668	11,314	1,098	458	108	30	+5·5	+84·1	+12·1	+11·9	+8·6	+164·8
38. Mysore	107,142	10,714	887	420	173	160§	+22·8	+8·0	+4·7	+17·7	+27·6	+77·7
39. Salem	102,170	23,065	073	339	72	67	+33·6	+4·3	-16·2	-11·7	+05·6	+101·7

* Not available. † For municipality only. ‡ For Delhi and New Delhi Cities only. § Born outside the district in which the city lies. ¶ Born outside the province in which the city lies. ** For Poona City Taluka.

Only seven of the above cities have more than 400,000 inhabitants, and these will be mentioned severally below. Of the rest it must be pointed out that the figures for Ahmadabad are more or less conjectural. That city determined on a